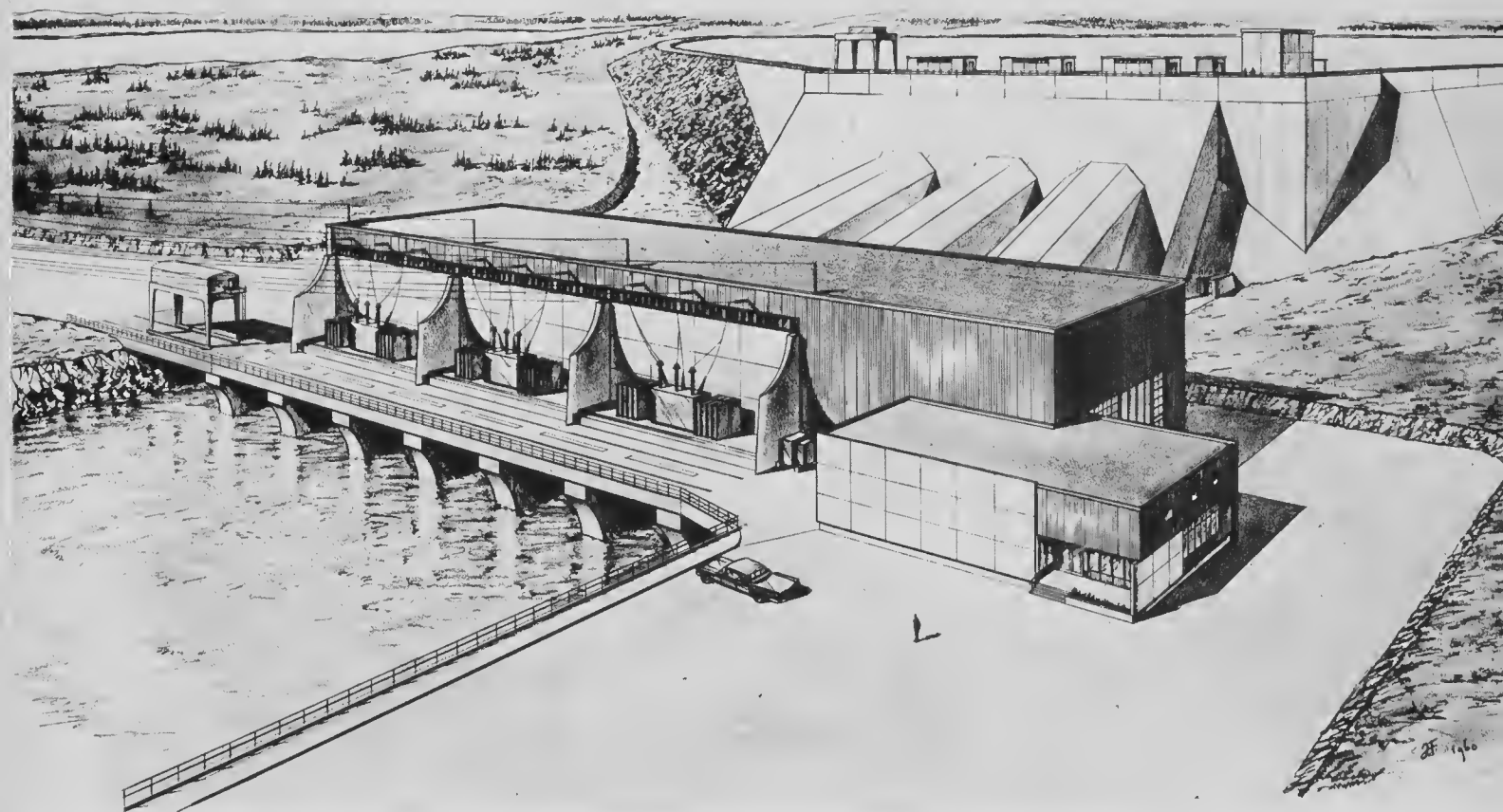


# SLIDE RULE



PUBLICATION OF THE UNIVERSITY OF MANITOBA ENGINEERING SOCIETY

VOL. 27

APRIL, 1961



# Faith of the Engineer

I AM AN ENGINEER. In my profession I take deep pride, but without vain glory, to it I owe solemn obligations that I am eager to fulfill.

As an Engineer, I will participate in none but honest enterprise. To him that has engaged my services, as employer or client, I will give the utmost of performance and fidelity.

When needed, my skill and knowledge shall be given without reservation for the public good. From special capacity springs the obligation to use it well in the service of humanity; and I accept the challenge that this implies.

Jealous of the high repute of my calling, I will strive to protect the interests and the good name of any engineer that I know to be deserving; but I will not shrink, should duty dictate, from disclosing the truth regarding anyone that, by unscrupulous act, has shown himself unworthy of the profession.

Since the Age of Stone, human progress has been conditioned by the genius of my professional forbears. By them have been rendered usable to mankind Nature's vast resources of material and energy. By them have been vitalized and turned to practical account the principles of science and the revelations of technology. Except for this heritage of accumulated experience, my efforts would be feeble. I dedicate myself to the dissemination of engineering knowledge, and, especially, to the instruction of younger members of my profession in all its arts and traditions.

To my fellows I pledge, in the same full measure I ask of them, integrity and fair dealing, tolerance and respect, and devotion to the standards and the dignity of our profession; with the consciousness, always, that our special expertness carries with it the obligation to serve humanity with complete sincerity.

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# UNIVERSITY OF MANITOBA ENGINEERING SOCIETY

## SLIDE RULE

VOLUME 27

APRIL 1961

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COVER: An artist's conception of  
the generating station at the  
Grand Rapids development in  
Northern Manitoba.

Courtesy: The Manitoba Hydro-  
Electric Board.

# A MESSAGE FROM THE DEAN

by

Dr. A. E. Macdonald, B.Sc. (C.E.), M.Sc., D.Eng., M.E.I.C., P.Eng.,  
Dean of the Faculty of Engineering and Architecture.



DR. A. E. MACDONALD

## YOUR RESPONSIBILITIES AND PRIVILEGES THROUGH THE U.M.E.S.

Once again, it is my pleasure to wish members of a graduating class, in engineering, happiness and success in their chosen profession. Without the one, life is but a drab existence and, without the other, it may seem somewhat futile. But, of the two, I am inclined to think that the first is the more important, for a happy citizen is an asset to any community. On the other hand, success is something having many definitions depending upon individual personalities. One man's meat may well be another man's poison. Be that as it may, members of the teaching staff, who have had some little influence in guiding you through your rigorous courses, will want to join me in wishing for you rewards commensurate with your efforts.

The academic session, just ending, has been a good one and I wish to commend the majority of our students for their fine attitude, good manners and close attention to their studies, as well as for the responsibility shown by the executive officers of our University of Manitoba Engineering Society. It is no easy task to influence every student for good in his general activities. Such a lark, as the visit to the University of North Dakota last fall and their queen honouring us with her presence in Winnipeg, was arranged in a most commendable manner. When some irresponsible students applied paint to

the sidewalks and buildings of the University of North Dakota, as reported, the action seriously detracted from the wholesome fun enjoyed by the majority. Such acts of vandalism negate the good spirits and happiness which would otherwise ensue.

Your teaching staff have contact with the U.M.E.S. Council through one of its staff members who is named the Faculty Adviser. As a matter of custom, the Faculty Adviser chairs a House Committee which is charged with order and good government in the Engineering Buildings. He should be competent to assume responsibility and act as liaison officer between the Council and the Dean, and through the latter with the Faculty Council of Engineering and Architecture. It is most desirable to know, well in advance, any proposed plans or events of the U.M.E.S. so that confliction of dates with other local activities may be avoided. Again, it is desirable for the Dean's office to know, as soon as possible after their election or appointment, the names of officers and members of the U.M.E.S. In some academic sessions, all these things are attended to automatically, but there seems to be nothing written in the U.M.E.S. Constitution to guide a newly appointed Faculty Adviser. As a matter of fact, I have been able to find in your Constitution no reference to such an office.

It seems reasonable to have the Faculty Adviser appointed by the U.M.E.S. Council. However, he should appreciate that his position is an active and responsible one and not merely a superficial honorary office. He should, at all times, be attentive to Council's plans and proposals and be ready to take a strong stand if these appear to be contrary to university policy or accepted mores. While the widely publicized ability of some engineering students to imbibe beer immoderately may seem to be amusing to some individuals during their irresponsible student days, it does not lend itself to public respect when the student becomes a Professional Engineer. The Faculty Adviser should be prepared to offer friendly advice on financial matters, along with other things which are always coming up during an academic year. At the same time, he should not interfere with Council's activities, unless he is definitely of the opinion that some action on his part is necessary in the interest of university policy.

Council must face the responsibility for all actions of the engineering student body which take place under the aegis of The University of Manitoba. Even though such may not actually take place under the name of the University, if engineering students are known to be involved, Council cannot escape some responsibility for their deeds. If some credit arises from the action, Council can share in it; but, if there is any blame, then Council cannot escape sharing in it also. So that, an attitude taken by Council of condoning, by paying no attention to, a proposed unwise action of any engineering students, cannot save it from censure. "No privilege exists that is not inseparately bound to a duty."

The Association of Professional Engineers of the Province of Manitoba is most desirous of having the Professional Engineer held high in the esteem of the general public and you, both as engineering students and graduands, should always keep this in mind in your extra-curricular activities.

## WELCOME TO ENGINEERING

### MISS KATHLEEN GILLESPIE

B.A. (Man.), B.L.S. (U. of T.)

LIBRARIAN

This year the staff of the Faculty of Engineering have received a most welcome addition. Miss Gillespie comes to us from the reference department of the university library and has also served in the National Film Board of Canada library in Montreal.

It is our hope that her stay with us will be a long and enjoyable one, and on behalf of the U.M.E.S. . . . Welcome.



# HONORARY PRESIDENT'S MESSAGE

from

R. G. CAWKER, B.Sc. M.E. (50), P.Eng., M.E.I.C.



R. G. CAWKER

As a University of Manitoba alumnus of only eleven years' standing, I appreciate deeply the honour you have done me in selecting me as your Honorary President, particularly when I recall the far greater experience and distinction of my predecessors in this honorary office. The opportunity of addressing you from the pages of this publication affords me even deeper appreciation, and a profound sense of humility.

If there is one thought I can give you from my experience from design engineering through sales engineering to engineering management, it is the tremendous field in all phases of business, be it big business or small business, for an open, enquiring mind, a sense of the challenge for original thinking and a new approach, and a sure sense of reliance upon and absolute faith in the basic principles of engineering you have absorbed, or are in the process of absorbing. This is not to say that the experience of others is not of value to you; there is no limit to the values obtainable by listening to, discussing, and reading about the experiences of others in your chosen field. Further, the direction and training you will be given in your work by your employers and superiors must be given full consideration and understanding, and of necessity to a large extent they must be given also your willing acceptance — but not without complete mental examination on your part as to their reasonableness and concurrence with the basic principles on which your education is based.

Always be willing to learn from training, from the experience of others, and from direction by your superiors, but never assume that a new approach on your part may not have inestimable value. There is always room for original thinking

and a new application of the basic laws of your science. Never be so humble as to assume that you cannot contribute something of your own to any endeavour you are in.

Do not think this will be easy to do. Nothing is ever achieved without hard work, and frequent frustrations and disappointments are always a part of our progress. It is all too easy to follow the accepted path, to avoid the frustrations by acquiescence with the system that exists; but this way lies oblivion. Progression and advancement comes only to those who contribute — contribute their whole mind, ability, training, and experience to the job ahead.

Canadian industry to-day faces the greatest challenge in its history. It is beset by ever increasing costs in both labour and materials, and faces the challenge of rapidly advancing technological achievement and low labour rates from the formerly "have-not" nations of the world. To combat this challenge, we are faced with the absolute necessity of instituting procedures and methods which will reduce our costs of doing business, and our costs of producing all the products, both natural and manufactured, that make up the life blood of our country. There is a place for you in this battle. No matter how large the organization, nor how successful it may seem, there is room for improvement, and a crying need for those of us who have the temerity, the willingness and the desire to achieve. No matter what your job, be willing to work hard, to use the experience of others, to follow direction and instruction, but above all, keep an open mind and look for opportunities to use a new, an original approach, and a new application of the basic principles of your science. the great science of engineering.



# A MESSAGE

from

## The Association of Professional Engineers of Manitoba

By: C. S. Landon,  
B.Sc.(C.E.), M.C.E., LL.D., P.Eng., M.E.I.C. (President)



C. S. LANDON

May I, on behalf of the members of the Association of Professional Engineers of the Province of Manitoba, extend congratulations to the engineering class graduating in 1961. The best of good wishes go to these men who are now to be engaged in the profession of their choice. To the undergraduates who remain to continue and complete the course of studies, may satisfaction and success attend their efforts.

Early in the month of October in the year 1907 there arrived at the office of the Registrar, 48 young men to register for the Engineering course which had just been set up. This was the first group of students to be registered by the University who would receive all of their lectures from its staff. Engineering was classified under the Arts and Science faculty until 1920 when the Faculty of Engineering was established.

The first concerted group activity undertaken by the engineers centred around the decision to enter teams in the inter-collegiate sporting events, controlled at that time by the denominational colleges. The question of a name which would designate the Engineering teams, was a poser. The group desired to enter their teams as the "University of Manitoba" but to this proposal the committee turned a deaf

ear. It suggested the name "University College" but the Engineers, with more foresight than they were aware of, rejected this. Finally the teams were entered as "University Engineers."

With this matter settled it then became necessary to choose distinctive playing colours, and again the students were confronted with a difficult situation. The colours which had been adopted by the several denominational colleges used up practically all of the primary ones. After many meetings no decision had been made.

Manitoba in those days was considered to be an agricultural province. What could, therefore, be more fitting than to choose colours which would have some relation to its most important industry. It was suggested by one of the engineering undergraduates that the colours "brown and gold" should be adopted because brown would symbolize the colour of the rich soil of Manitoba and gold that of the wheat which was being produced in ever increasing quantities. "Brown and Gold" are the official colours of the University of Manitoba and they were chosen in the first instance by engineering students in the days not long after the University became a teaching institution and not merely a registering body, as it had been since its incorporation in the year 1877.

It soon became apparent to the teaching staff of those early days that the engineering students needed an organization, at meetings of which they could discuss matters that concerned all and from which decisions made could be presented to the University authorities with a unified voice.

There was no medium through which social events could be planned and carried out and the football, hockey and other sporting pursuits needed central supervision.

To the professors, particularly the late M. A. Parker and Dr. Frank Allen, must be given the credit for the final founding of such an organization. Their advice and counsel kept the thinking of the students on the University rather than a restricted faculty level and many of the methods of operation and management such as they had known of similar student organizations at the Universities which they attended were embodied in this one. These professors also advised and suggested the name, and in this manner the University of Manitoba Students Union was founded.

It worked and flourished until the early years of the First World War but no record of it now exists. The Secretary of the "Union" at the outbreak of the Great War was R. I. Lothian, a member of the first graduating class, who lost his life overseas. Where he kept the book of constitution, the by-laws and the minutes of meetings, diligent search and enquiry have failed to discover. The setting up of this "Union" must be regarded as another first for the Engineering graduates and while the existing University of Manitoba Students Union does not resemble the earlier one to any appreciable extent,

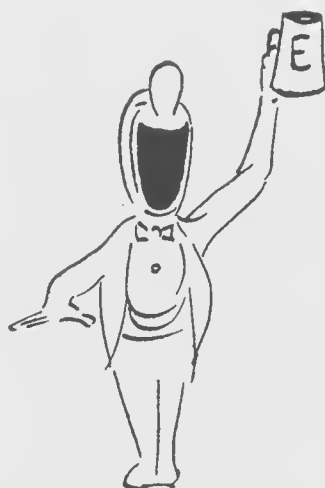
yet the aims and objectives and the operation and influence of the two are not dissimilar, although they differ greatly in scope.

The early classes in engineering are not responsible for the University "yell." This I believe was adopted some time after the present University Act was passed and the large classes of Arts and Science began to appear on the campus.

They did, however, adopt one of their very own, which in part deals with the demolishing of forty beers, a pastime, I have learned from attending the annual meetings of the University of Manitoba Engineering Alumni Association, in which some of the graduates have developed a certain degree of proficiency.

The few items of early happenings which I have mentioned do not exhaust the list of firsts that were established and operated and made a part of student activities by the Engineers and which have laid the foundations for many of the traditions which have become a living part of the functioning of these today.

I hope that the undergraduates and those of you who are leaving the world of the campus to now take your part in the larger field of world endeavour, will always regard with pride and affection the University of Manitoba — a great seat of learning — and your own Engineering faculty. As far as it is possible keep in communication with your classmates and never forget that you leave behind traditions that have been built up over the last fifty years and that you have in a measure helped in the establishment of some of these.



# MAN and HIS HORSEPOWER OUTPUT

by

Asst. Professor H. E. T. North

U. of M.

If the engine in a typical 285 horsepower automobile were replaced with a tread-mill, how many human beings are needed to produce the full power of the original engine? The answer is about 632 people which makes it easy to see why Detroit has not adopted this novel form of powerplant. Based on the average wage in Canada the cost of operating the tread-mill car would approach \$222.00 per mile in salaries alone. The high cost of maintaining a human being coupled with his low power to weight ratio makes it impossible for man to sell himself as a substitute for the internal combustion engine.

The economics of the situation are conclusive and it is for this reason that few people have been interested in accurate, quantitative information concerning man's horsepower output.

The test rig shown in the accompanying photograph has been constructed without regard for commercial application. Its purpose is to measure accurately the limitations of man as an engine. More specifically the object is to determine whether or not man is able to produce enough power to literally pedal himself into the air. In other words, if an efficient and suitable aircraft were designed, is man strong enough to fly it on muscle power alone.



This idea is by no means a new one; man-powered flight has been considered since mythical times and some rather serious attempts have been made with equally serious consequences. More recently, in 1929 and 1937, "single-man" powered aircraft were designed and built by competent and outstanding engineers in the aeronautical field. They flew, but were not successful in staying airborne for more than a few doubtful seconds. In 1957, Lister Robinson at the College of Aeronautics re-studied the problem in the light of modern developments. His calculations showed that a two-man aircraft could be designed and built which would require about one and one-half flying horsepower. Existing data shows that one man is able to produce in the order of 0.45 horsepower for extended periods. A world champion cyclist, in a 20 second burst of effort, recorded an output of 1.3 horsepower before collapsing. This evidence indicates that two men have the precious little horsepower needed to qualify as a powerplant for a specially designed aircraft, however, the manpower available is marginal indeed.

It is obvious, then, that the performance of the human engine, being the key to success in the venture, must be accurately determined before further effort is spent on the detail design of the aircraft. Our choice of an optimum crew is three. This is based on both structural and aerodynamic considerations. It can be seen from the photograph that the test rig accommodates three people, two pedalling with their hands and feet, one pedalling with his feet only leaving the hands free to operate the "flying" controls. Actual flight conditions can be duplicated by pitching and rolling the complete apparatus.

The test rig has the single purpose of further establishing the possibility of man powered flight although it could also be used in the selection and training of a flight crew. It represents but one step toward collecting more accurate information for the design of an actual aircraft which, incidentally, could become a reality in the not too distant future. Data from the Human Power Output Flight Test Rig will make an important contribution to the growing technical interest in the challenge of Man Powered Flight.



Ken Copeland  
Secretary



Gary Reed  
Treasurer



Chuck Honeyman  
Senior Stick



W. D. Alexander  
Faculty Adviser



Bill Reid  
Sr. UMSU Rep.



Frank Houston  
Constitution



Gord Crabtree  
Athletics

## U.M.E.S. COUNCIL



Stu MacPherson  
Social



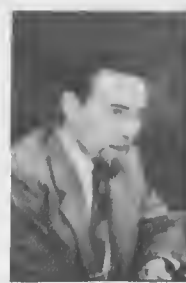
Bill Fisher  
Jr. UMSU Rep.



Rod Bower  
Tours



Jim Marshall  
Publications



Frank Best  
Debating



Brian Grover  
S.E.I.C.



Dave Banks  
Publicity



Orry Sideris  
Drama



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Brown & Gold



Steve Kawalec  
Freshie Week



Ray Roscoe  
III Civil



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III Mechanical



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III Electrical



Vern Rampton  
Geological

## CLASS PRESIDENTS



Gord Skinner  
2-1



Bob Lynch  
2-2



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2-3



Don Brown  
2-4



Dave Rathgaber  
1-1



Jim Tinlin  
1-2



Brian Dumas  
1-3



Bob Fowler  
1-4



Ron Coley  
1-5



Bob Foster  
1-6

# SENIOR STICK'S MESSAGE

by C. P. Honeyman,

Senior Stick of the Faculty of Engineering



"CHUCK" HONEYMAN

"Engineering students don't belong at a university," "Everybody hates engineers," "Engineers are illiterates." Such expressions are familiar to anyone who has had the good fortune to spend more than one year in the Faculty of Engineering.

The fact remains, however, that in spite of this attitude, or perhaps because of it, engineering continues to flourish as the leading faculty at the University of Manitoba. Students at the university may not like us, but we have earned their utmost respect.

Outside the university, the engineer of today is coming into his own as a respected member of the professional fraternity. He is the one member of the community whose training enables him to follow ideas from their scientific conception, through the processes of development and marketing, and finally to equate the results to benefit in terms of human progress.

Perhaps it is up to the student engineers to broaden their outlook upon the rest of the university, as our graduates are doing with regard to the rest of Canada. While singleness of purpose and faculty spirit are fine in their place, why can they not be used to strengthen the student body as a whole, instead of weakening it.

We have heard much talk in recent weeks about succession from U.M.S.U. We know there are facul-

ties such as Engineering, Architecture, St. Paul's and St. John's that would probably be better off if there were no campus-wide student organization, but surely we can't take as narrow a view as this.

The recent alumni conference has been termed a success. At last, Manitoba is showing some signs that it might turn out to be the sort of place you think of when you mention the word, "University." Why not follow the lead and use our position of strength and respect to bring all faculties of the university into a closely knit group rather than be, "up in arms," whenever our autonomy is threatened?

Whatever the fate of the U.M.S.U. over the coming years, keep in mind that we are engineers, first, last and always. Let's get out and debate, enter mock parliament and be active in all phases of student activities, but let's not forget to boast long and loud about the powers and superiority of the engineer whenever, or wherever we get the chance.

In closing I should like to thank all the members of the U.M.E.S. who have contributed to what I hope will be a successful year. It has been a pleasure working for you.

Best of luck in years to come.

# TREASURER'S REPORT

by Gary Reed



GARY REED

This past year was financially very successful for the student council. The reasons for this success were quite evident; mainly due to a \$2.00 increase in student fees, effective last fall, and the fact that the council, fresh from a rather fragile financial year in 59-60, was very well versed in the financial activities of the faculty.

I also had the distinct advantage of having the past treasurer readily accessible to answer questions pertaining to procedure, etc. of the treasury. At the beginning of the term I felt rather helpless when confronted with the books, about which I knew nothing, but with Frank's guidance it was only a short time before I felt right at home.

Continuity of the Engineering Societies treasury is very important to the efficient handling of monies from year to year. I realize that the incoming and

outgoing treasurers usually get together before the end of the year so that the new treasurer can be briefed on the workings of the treasury, but this is hardly adequate. Only when the treasury actually gets rolling can any advice be appreciated. The solution to this is, of course, to choose the treasurer from the present second year class. I'm only putting this forward as an idea to solve the problem; there are others. This solution may be difficult to implement since the treasurer is traditionally the runner-up in the Senior Stick election, but with a total budget of over \$8000.00, some solution should be found.

I'd like to thank all council members, and in particular, the assistant treasurer, Dave Swan, for their support and cooperation in making this year the success it was.

# CONSTITUTION COMMITTEE

by FRANK HOUSTON, Chairman



F. HOUSTON

A constitutional chairman and committee were appointed by the UMES council this year for the purpose of rewriting the UMES constitution. Amendments which have been approved during the past few years were added and new material and definitions included, with the hope that the new constitution will provide reliable guidance for future UMES councils. Copies of the new constitution will be posted in all labs and on the bulletin boards at the commencement of the fall term.

# FRESHIE WEEK REPORT

by

STEVEN KAWALEC,  
Freshie Week Chairman



S. KAWALEC

The 1960-61 edition of Freshie Week proved quite successful for Engineering.

It all started in early September, at which time the float theme was chosen to be the Whiteshell Nuclear Reactor. What did it look like? No one knew. Being Engineers we decided our own design would be second to none.

The shape of the Reactor Building was to be a huge parabola with two hyperbolic chimneys. The parabolic Reactor building was to contain a mobile of an atom, depicting atomic power in the nuclear pile.

The parabolic-hyperbolic Nuclear reactor (another well known structure was later fashioned on the same principle) was ready to be assembled. Within the confines of Room 107 Mech Lab, five or six of our more industrious Engineers could be found, busily sawing and hammering like mad, trying to complete the float before Parade day.

After many days and nights of toil the thing was finished and ready for the Freshie Parade. As usual, there was a herd of eager, rowdy freshmen out to guard the float and get into the spirit of the

occasion with much noise, loud yells and occasional violence. But after all that effort, it seemed that the judges weren't as struck by the merits of our display as the spectators. Oh well, wait till next year.

As an added attraction the Engineers constructed a "Paddy Waggon" fully equipped with "Bowery Cops" under strict orders to take custody of all vagrant females found on the Parade route.

Success came in another form to Engineering in the shape of beautiful and charming Joan Newman, the Engineer's choice for Freshie Queen. Once again natural beauty and Engineering triumphed when Joan was crowned University Freshie Queen for 1960 at the Royal Premiere. Congratulations Joan!

Many belated thanks to Prof. Chant for the use of Lab 107, Prof. Alexander for welding the "thing" together, Mr. Tonn for the tools and assistance and a black eye to VLD for saying the float would collapse. Also many thanks and social points to Frank Houston, Jim Marshall, Bill McLean, Roy Klop, Laura, and freshman slave labour.

Good luck in your final exams.







**FRESHIE QUEEN**

**JOAN NEWMAN**

Engineering

**1960**



# DEBATING REPORT

by

F. O. BEST  
IV Civil



F. O. BEST

This year saw the introduction of a Debating League to our faculty, and apart from a few birth-pangs, the arrangements and the debates themselves went off quite satisfactorily. The attendance for these debates was generally good and the calibre of the debaters, in the main, justified the interest shown. It might also be mentioned that the choice of topics had something to do with the size of the audience! It is to be hoped that this league will continue and that some of those who took part in the debates will progress to Dingwall Competition. The league will be carried on through the Spring Term and an eventual winner for the Debating Cup decided.

In Dingwall Competition, the Engineering Team competes in the Gold League, and at time of writing is 3rd with 4 points behind St. John's and United College, who have 7 points and 5 points respectively. Unfortunately, because of defaults by the opposition, we actually competed in only one Dingwall Debate in the Fall Term, losing to St. John's in a close contest. In this debate we were represented by the two good-looking gentlemen below shown resolving another problem. The Dingwall League will also

continue through the Spring Term and the debaters from Engineering should be at the top, or close to, when the league finishes. Audience support for these debates helps your own team considerably and so let us keep up the interest shown in these contests. By the finish of the Dingwall League, there should be a core of debaters, both from Dingwall and Engineering League Competitors, who will be able to maintain and improve the record of Engineering in the years to come. It is a fact, strange to relate, that Engineering is looked to as one of the keener faculties on Campus in Debating. "Oo sez we ain't got kulture?"

Be that as it may, there has been an upsurge of interest in debating in the faculty; it is hoped that a team from the Professors will be inveigled into debating. This, if it materializes, is a must. You will probably get more out of this one debate than a score of lectures.

Finally a word of thanks to Avie Arenson who has given full support to debating in our faculty, and others such as Bill Fisher, Dave Swann, Steve Kawalec, Jim Tinlin, et al., who have supported the programme this year to make it a success.



# TOUR REPORT

by

ROD BOWER  
Tours Chairman



ROD BOWER

Several interesting and informative tours were conducted during the year. The tours were arranged primarily for specific classes but attendance was supplemented by interested members of other classes and years who had time available on the tour days.

Among the plants visited were a number of Slide Rule patrons as well as other businesses who showed interest in the purpose of the tours. Two fourth year classes visited two well known beverage manufacturing plants where free samples were dutifully accepted by the students in the interest of promoting better relationships between U M E S and these companies. Two spring term tours are in the planning stages.

In the spring term one of the most extensive Kiddies Days, or High School Students visits to the factory, (our home away from home) is in the planning stages at the time of writing. Many of the labs are to be in operation and many educational

practical displays are to be set up. Guides will be supplied from the third and fourth year classes, and complete circulation through the building, labs and classes by the students is the object. Plans are being made to present the visitors with Power Prom issues of the Manitoban and surplus Slide Rules from previous years to prove that engineers' interests are not confined to academic efforts and elbow bending. This year the faculty are taking a greater interest in this visit and through the combined efforts of the faculty and the student body we are looking forward to a highly successful effort.

In closing, I would like to express my thanks to all those people who have helped make this tours year a success. In particular I would like to thank Prof. Alexander, Steve Kawalec and Roy Klopp. There is much more room for improvement in tours and I wish next year's chairman success and hope that he may benefit from my experiences and attempts at organizing and developing this chairmanship.



## POWER PROM QUEEN 1961



*Miss Marion Dunning*

# ENGINEERING SOCIAL REVIEW

STU MACPHERSON — SOCIAL CHAIRMAN



STU MACPHERSON

Without a doubt, this year has been one of the most successful we've ever had in Engineering, socially speaking. All the events were very well attended, which is the most important thing, and those who were there will tell you they had a ball! Let's look back at the social year and see just what we've done.

## FRESHIE WEEK

Under the direction of Freshie Week Chairman, Steve Kawalec, things rolled along very smoothly, and the hectic week was very successful. By far the most important single event of the week was the fact that our own Miss Joan Newman was crowned Freshie Queen for the year 1960.

## FRESHMAN BANQUET

With about 120 Freshmen attending, the annual Banquet and dance was a decided success.

The Honorary President of UMES, Mr. R. G. Cawker, gave the fellows attending some choice words of advice to set them to thinking about their next four years of study. The Dean and Senior Stick also added their good wishes and advice to the Freshman Class. The banquet was followed by a dance, which was livened up considerably by the appearance of some 120 girls from Home Ec and General Hospital. Naturally, the promise that these lovelies would be there had no small effect on the good attendance figure! All in all, it was a lively crowd, and a wonderful evening.



## POWER PROM

According to many professors and other "old timers," this was the best Power Prom ever! In a brand new location, this year's Power Prom had one of the largest crowds ever, with over 600 people having a real ball in two ballrooms — with two orchestras yet!

A reception was held before the dance, for the staff and council members, the Queens and their escorts. At this affair, the Queens were introduced to the judges, who tried to reach a rational decision. I say "tried," because this year's selection of candidates was just fabulous. Every one of the girls was — well see for yourselves, check the pictures! The Queen of the Power Prom was Miss Marion Dunning, the charmer representing 1st year. She received the traditional beer mug from our Honorary President, Mr. R. G. Cawker, and a bouquet of roses from last year's queen, Miss Bonnie Wrighton.

After the dance, many retired to the party rooms for a night cap and generally whooped it up for quite some time to round out a terrific evening.

## GRAD'S FAREWELL

As we go to press, this important event has not yet been held. It will be, however, one of the biggest graduating classes in our history, and it should prove to be quite a memorable smash. Almost one hundred and sixty grads and their girls will be assembling at the Fort Garry, for their final hurrah before venturing out into the cold, cruel world.

## AWARDS BANQUET

This event, yet to come, is held to honour those fellows who have contributed their time and talent to the good name of Engineering. Those who qualify for sports and social awards will gather at the

Fort Garry Hotel on March 20, for the annual banquet, and post-banquet ales.

In summing up, I would like to say that I am gratified to see so many true blooded Engineers showing up to the social functions of this year. It is, of course, up to the individual members to make such events a success, and with your support, I feel that we have had an extremely successful year.

I would like to take this opportunity to wish all my fellow graduates the very best in all their future endeavours; and to thank all those who have been so much help to me in the past year.



# S.E.I.C.

by

BRIAN GROVER

Section Chairman

The past year has been a banner year for the University of Manitoba Student Section of the Engineering Institute of Canada. The purchase of the new banner was an omen of the successful program which followed.

Forty student engineers from 20 universities across Canada visited Winnipeg for the 74th annual E.I.C. Convention, during the month of May, at which U. of M. members were hosts. Three enlightening and enjoyable days of discussion ensued.

When the fall term began, the S.E.I.C. membership drive was launched, and resulted in the joining of 140 new members. Of a total enrolment of about 670, some 370 engineering students were members of the S.E.I.C. this year.



Student paper presentation by Elmer Malakoff, IVC.



S.E.I.C. Executive: A. Arenson, D. Brown, B. Grover, S. Kawalec.

Thursday noon hour programs were presented throughout the year. Attendance indicated that the films and speakers were both interesting and informative. The student papers competition of the second term allowed several fellows to present papers and vie for the prize money offered by the Winnipeg Branch of the E.I.C. The March dinner meeting with the local branch, at which student awards were presented, proved to be a pleasant evening.

Throughout the year, the S.E.I.C. attempted to promote the interests of engineers and engineering students in Canada, in keeping with the traditions and objectives of the Institute. Upon graduation we will realize just how important it is that we act together in a manner worthy of our profession, and how much association with other members of our profession can benefit us. For this reason, membership in the Engineering Institute of Canada should always be regarded as a privilege of which we should take advantage.

This year's executive has been Brian Grover, Chairman, Don Brown, vice-chairman, Avie Arenson, secretary-treasurer, and Steven Kawalec, membership chairman. We are grateful for the attention and assistance given to us throughout the year by Prof. McMath, our faculty adviser, Tom White, our projectionist, and the Winnipeg Branch of the Engineering Institute of Canada.

# SPORTS REPORT

By Gord Crabtree  
Athletic President



G. CRABTREE

At the time of this report, Engineering was maintaining a narrow lead in the Kotchepaw Trophy race but it is expected that our volleyball squads will shortly place us comfortably in the lead to our fifth consecutive triumph over the lesser faculties. I would like to take this opportunity to extend my thanks to my conveners, who have served their faculty so well and to the section athletic reps and presidents who have helped to encourage and bolster maximum participation in the faculty. I also would like to thank every engineer, who has gone out or will be going out to represent his faculty in sports. It is only through your untiring efforts that we can prove once again that we are the best damn faculty on this campus.

## BASKETBALL

This year our basketball teams were as strong as ever. We are only allowed 5 teams and each team consisted of between 10 to 15 potential stars. The two senior league teams were not as powerful as the three junior squads in their respective leagues. One senior team tied for the last playoff berth but missed getting into the playoffs due to losing out on a for and against basis. This team was led by Vic Becker and Glen "Moe" Morrison. The other senior team was composed one hundred percent of civils and didn't show too much. Ken Nixon starred for them in their one big win.

The bright spots in engineering basketball this year were the three junior teams, all of which finished first or second in their respective leagues and combined lost only one game during league play. One team, composed mostly of electricals, was sparked by George Pavlin and Dennis Ayden, and an almost completely mechanical team proved to be too much for the other faculties due to the efforts of Wayne Sorby and Dave Hobson. It was encouraging to see our Big team from first year take their league with ease, which shows future promise for our senior teams. Ken Hibbert teamed up with the Loewen brothers to show the other faculties on campus how the game should be played.

With three out of five teams going into the playoffs, our hopes are up for an engineering victory, but whatever happens we can be proud of our basketball teams this year.

## CURLING

This year engineering did not manage to once again be the perennial bridesmaid in the Porte Markle event. The team of Bob Johannson, Harry Martel, Gord Crabtree, and Harry Hallewell bowed to the Dentistry rink in a last end affair that was a heart-breaker. Harry Martel was a tower of strength throughout the game, but the sun refused to shine on the engineering squad that day.

The interfaculty teams are more than holding their own, so far this year, and should capture engineering's third straight championship. The teams are composed of Gord Crabtree, John Roche, Terry Martin, Ken Copeland, Bob Johannson, Norm Blaine, Ron Buchanon, Phil Wake, Harry Martel, Harry Hallewell, Gary Reed and Mort Walker.



INTERFACULTY CURLING TEAMS: Back: Bob Johannson, John Roche.

MIDDLE: Norm Blaine, Ron Buchanon, Gord Crabtree.

FRONT: Harry Halewell, Mort Walker.



## FLAG FOOTBALL

1960-61 proved to be a banner year for the engineers in the flag football field. With a record 13 teams entering the fray, the other inter-faculty teams immediately faded into obscurity. When the preliminary firing had ceased, three out of four finalists for the championship turned out to be engineering squads. Short work was soon made of this fourth unknown upstart and this left the road wide open for an all engineering final.

Led by the strong throwing arm and general field wizzardry of Steve "Flash" Seniuk and aided by the outstanding playing of such super stars as Big Len Baydack, Ken Copeland, and "Jarring" Jim Richl, a group of grade two kids narrowly edged a crew of hardy veterans, to take the interfaculty crown.

Good enough for third spot in the competition were a group of third year electricals plus assorted types. Heading up this group was the one-two punch of C. Krahn and Vern Rampton.

All in all, unquestionable evidence of engineering superiority.



CHAMPIONSHIP FLAG FOOTBALL TEAM: FRONT: L. Baydack.  
MIDDLE: J. Richl, S. Seniuk, G. Skinner.  
BACK: R. Ford, R. Keltie, K. Copeland.

## VOLLEYBALL

Although the volleyball season is just beginning to roll, Engineers are obviously the choice for champions. This year 30 teams entered from Engineering with most of them being successful to date. IV C leads the volleyball tournament by having teams Eng. 1 and Eng. 2 as yet undefeated, after playing 5 games apiece. Unfortunately one of these teams will have to lose out, and from all appearances, team No. 2 will be the one. However, either way it appears engineering has the intra-mural championship cinched for the eighth consecutive year.

## BOWLING

Once again, Park Alleys was the scene of the University League and the engineers have proven to be the true strike artists. A total of ten stalwart fellows like Bob Sparrow, Greg MacDonald, Terry Green and Jim Dempsey, to mention a few, had the alleys to their liking, much to the pinboys' consternation. We will be looking for the 200 men to lead us to victory in the annual rolloff. From all reports the interfaculty trophy is almost assured.

## SKIING

At this writing, two of the three events making up the Varsity Ski Club championships have been run off. The third contest, the cross country race, is to be held on campus during the Winter Carnival. A good Engineering turnout was on hand at La Riviere Jan. 17 for the slalom and downhill races to defend the team title they have held the past two years. Led by Gary Koreen's second place finish in the downhill and Doug Scott's third in the slalom, the Engineers piled up a 130 point lead over St. Paul's in the drive for the team championship. Bruce Watson, Greg Macdonald, Frank Pickersgill, Dennis Ayden, Gary Reed, Ted Pentland and Harold Riml all finished well in a field of 40 contestants.

## TENNIS

The fall tennis tournament, played partly on the brand new outdoor tennis courts, was won for the second year in a row by Tibor Elekfy of second year engineering. It was a very creditable win as Tibor took the measure of Rolf Martin in the finals.

## ARCHERY

In archery, Engineering, as it does so often, came out on top. The combined efforts of Cowan, Kustra, and Fraser cinched first place. Cowan also took the individual honors with his high score of the day. A good showing was also made by Snaith and McLean.

## HANDBALL

As usual, handball was one of the engineers' most keenly contested sports. The singles tournament drew a large entry from the beermen. Players who made the interfaculty fours were Gary Reed, Bob Sparrow, D. Snaith, and Stan Johnson. Due to a slow start in practice the fellas were unable to get untracked and consequently did not show too well. However, the doubles tournament is coming up and it should be an engineering pushover.

## BADMINTON

The badminton entry is always good, although this sport is not usually considered the typically engineering type. Nevertheless, a fair showing has usually been made. For the past two years, a finalist has been Max Boyachuk, who has fought bravely but lost graciously to such notable players as Jacob Wong and Rolf Martin.



**SPORTS CONVENERS:** Ken Nixon, Rick Chase.

**MISSING:** P. Feschuck, Max Boyachuk, George Pavlin, Doug Scott, Mitch Miller, Mac Holaroyde, G. Crabtree.

## RIFLE

This year ten teams were entered in intra-mural competition. With league finals underway, Eng. II, comprised of C. Bridgeman, C. Jack, C. Bright and D. Kroeher chalked up a 800-55X, only slightly less than the all-time high set, of course, by the beermen last year. With our top team still to be heard from, it appears only a formality before the beermen take first and second place in the final standings. The C.O.T.C. and Individual championships have yet to be fired. Engineering hopefuls for the varsity team are Carmen Bright, Elwood Morris and Scott Thompson. Engineers will, doubtless, lead the way in these events.

## GOLF

This year sixteen stalwarts from engineering donned their spikes and merrily wended their way around Niakwa's well groomed course. One third of these were fourth year civils and they made such a mess setting their levels up on the greens that the greens committee are thankful they will be graduating this year.

However, some talent from Eng. also went out in the persons of Bill Nicholson, B. Dykes, Les Wolton and some clod named Crabtree. These fellows managed to take the team championship, though hard pressed by Accountancy. Gord Crabtree was also a member of the Inter-Collegiate team which travelled to Edmonton for the W.I.C. tournament.

## SWIMMING

This year engineering decided that we would only need to send down four engineers in order to take the swim meet. H. M. Holroyde placed in the 100 yards free style while Mitch Miller placed in the 50 yard breast stroke and 50 yard free style events. E. Malakoff and P. Gittens then combined with Holroyde and Mitchell to finish the meet off by placing in the 200 yard free style relay. Unfortunately, this was only good enough to place second as United sent down thirty some odd competitors. Therefore, to be sure of winning next year, I would recommend five engineers.

## SOCCER

The first division team fared quite well in its league, reaching the finals. It was the first engineering team to do so in some years. Unfortunately, the team lost 4-0 to United in the finals. This same team which in previous games had played a good tight game of soccer, even to the extent of beating U.C. a few days before the final, could just not get untracked. Injuries played a major part in the game and much credit should be given to Alistair Buchanon, who played the game with three cracked ribs and Max Schjerning who had a sprained ankle. Throughout the year, all the players gave their best but special mention should be given to Waldo Tibelive, Bob "Wrongway" Petri, Geoff Stephens, "Crazy Legs" Patino and Orace Ackett! Thanks are also in order for Frank Best who not only played hard all year, but also did an excellent job as soccer convener.



**SOCCER FINALISTS:** Back: D. Ramsey, B. Petrie, A. Kuluk, W. Tibelius, M. Schjerning, G. Webb.

**FRONT:** E. Malakoff, F. Best, G. Stephens, H. Hackett, K. Patino, H. Sperber.

## TRACK & FIELD

Track and field competition was keener than usual, the result being that engineering was only able to tie for second place. Good showings were made by Ron Greenlay and Bernie Melman in the shot-put, Tibor Pataky in the discus, Al Fenton in the broad jump, Brian Curran in the dashes and Max Boyachek in the 2 mile event. A formidable competitor in the 100 yard dash was Borys Shulakewych, who broke the tape at 10.1.

The road race was ruled by engineering, as usual, with over 100 entries. However, we weren't all runners that entered, and this has brought about a maximum time limit rule for future races.

The cross-country run didn't have the usual engineering backing because of sluggish conditions but nevertheless a few stalwarts braved the elements.

We had two good representatives in the WCIAU cross-country race held at the U. in late October. Stan Kipek and veteran engineer harrier Max Boyachuk, helped host the western universities to a grueling 4.1 mile grind.



#### SIX-MAN FOOTBALL:

BACK: K. Hewett, Terry Partridge, Chuck Honeyman.

FRONT: Bob Lynch, Gary Reed, R. Gittens.



#### SIX-MAN FOOTBALL:

BACK: H. Wall, Ron Greenlay, Mac Holaroyde.

FRONT: M. Mitchell, Gord Jurgenson, Ray Roscoe.

### SIX-MAN FOOTBALL

Great things were expected from the engineering entry this year. Only two men graduated from last year's powerful team and the opening practices saw 30 men trying out for the squad. The first game was a close loss to this year's winning Science team. Our second game proved to be the high point of the season when we trampled our arch rivals Medicine 46-6! Naturally they failed to show up for our second scheduled encounter. From this point on, in the season, our team was plagued with injuries with the climax coming when half our offence was out for one game. However, all games played were close and the team's hard charging defensive line, led by Gary Reed, was our outstanding feature.

### HOCKEY

Looking forward to a banner year in the inter-faculty hockey wars the engineers have four separate teams. The other faculties are already cringing as they have heard about the mighty team for IV civil. Led by "little" Rod Bower, "Crusher" Grover and Harry Martel, the slide rule men present a solid backbone. Ron Triffo presents the largest scoring threat and maybe this is the year he will get a goal. Switching to Senior A, our team bears much watching. Led by player-manager Vern Rampton, Ken Hewitt, Tom Patteson and Corny Krahn, the squad should be a sure bet for the playoffs. The senior C team, managed by Gord Bradshaw and junior A's, managed by Don Brown, already have several victories under their belts and will undoubtedly bring glory to the faculty.



SPORT CONVENERS: BACK: Ray Haag, Elmer Malakoff, Ron Triffo.

FRONT: Brian Grover, Gary Reed, Frank Best.



INTRA-MURAL GOLF TEAM CHAMPS: W. J. Nicholson, B. J. Dykes, G. Crabtree. Missing: D. H. Lewis.

G. Crabtree, member of Intercollegiate Golf Team.

## CIVIL STAFF



E. S. MAGILL



A. G. LARSON



A. BARACOS



W. F. RIDDELL  
Professor and Head of  
Civil Engineering



O. MARANTZ



V. L. DUTTON



A. J. CARLSON



E. KUIPER

## CIVIL STAFF



W. P. BELEY



M. MINDESS



G. L. CLAYTON



T. W. GODFREY



R. LAZAR



E. DOLHUN



C. BERWANGER



J. I. CLANVILLE



C. A. MORRIS

## GEOLOGICAL STAFF



D. T. ANDERSON



H. D. WILSON



G. A. RUSSELL



G. M. BROWNELL  
Chairman of Dept. of  
Geology



W. C. BRISBIN



E. I. LEITH



R. B. FERGUSON

## MECHANICAL STAFF



H. N. GAWLEY



C. P. BENNETT



W. J. PATTON



W. D. ALEXANDER



R. E. CHANT  
Professor and Head of  
Mechanical Engineering



D. W. CRAIK



C. G. FRITZ



H. J. T. YOUNG



H. T. NORTH

## ELECTRICAL STAFF



H. A. MACDIARMID



G. W. SWIFT



S. G. WICKS



J. P. C. McMATH  
Professor and Head of  
Electrical Engineering



H. M. HAAKONSEN



E. BRIDGES



W. SHEPHERD



R. A. JOHNSON



## ALIENS



R. C. BELLAN  
Economics



F. ZIELER  
Mathematics



J. O. TURNER  
English



R. J. LOCKHART  
Astronomy

# FIRST YEAR ENGINEERING

POWER PROM QUEEN CANDIDATE



*Miss Marion Dunning*

## SECTION 1



BACK ROW: R. Butcher, E. McVicar, C. Lewis, B. Spak, C. Simonsen, G. Sawatzky, A. Hlady, G. Hodgins, E. Hare, R. Christiuk, W. Litvinchuk, R. Milburn, B. Pollock, T. Jergens, B. Wright, H. Spenst, J. Munson, J. Herbert, H. Sibettler.  
 FRONT ROW: H. Motyka, G. Webb, E. Tymkiw, S. Granger, E. Pauch, G. Hood, C. Lambert, B. Cannon, R. Kulish, M. Yunik, F. Barlishen, D. Rathgeber, B. Hamilton.

Section one, the pride of first year, is symbolized by its mascot Maurice, "What me Worry?" Yunik. A hard working group, it is characterized by limited participation in athletic events, spearheaded by "George the Jock" Sawatzky. The debating "eloquence squad," headed by Ivan Archer, is likely to remain undefeated all year.



## SECTION 2



Back Row: D. Simpson, J. Simmonds, J. Ray, B. Park, T. Green, W. McLean, J. McIntosh, T. Morris, M. Beaubien.

Middle Row: J. McPhail, T. Christison, C. Shoemaker, B. Crandell, J. Bomford, L. Arbez, R. Kropp, G. Olson, R. Karpiak, E. Van Humbeck.

Front Row: R. Sandalack, B. Mitchosky, G. Filmon, N. Trusewych, B. McDonald, W. Kepron, J. Tinlin, G. Kwong, H. Plenert, W. Wagner, S. Folb, B. Shulakewych, L. Boily.

This year Section 2 of Engineering I has contributed a great deal to activities in the faculty. It began with the election of James Tinlin as president of the section, Bryan Park as sports representative and Wes Dolhun as Slide Rule representative.

James Tinlin has proved his worth both to the council and the S.E.I.C. In the membership campaign, Jim solicited 25 new members for the S.E.I.C. and won the \$10.00 prize. This money was subse-

quently donated to the Community Chest by the section.

In other activities such as volleyball, Section 2 has also done well. In regular league play, the team had only one loss.

In debating, under the chairmanship of Bob Karpiak, the team of Jim Tinlin and Gary Filmon went undefeated.



## SECTION 3



BACK ROW: H. Wattis, B. Dumas, M. White, R. Clearwater, J. Allan, D. Clarke, R. LeBleu, H. Senf, J. Harcus, R. Wazney, M. Fidler, A. Staudzs, R. Watt.  
FRONT ROW: K. Mackenzie, P. Boux, H. Borger, L. Wotton, J. Liska, V. Swiatkiewicz, R. Miller, R. Suderman, R. Sill, A. Zaleski, E. Rewucki, D. Kilpatrick.

Section 3 began the 1960-61 campaign by electing Brian Dumas as president and Victor Swiatkiewicz as athletic rep. Sportswise, Section 3 is quite pleased with the entering of an entire rink in the interfaculty curling league. Those playing are: Mike Laskowski, lead; Pierre Boux, second; Lorne Wotton, vice-skip; and Bob Miller, skip. To date 5 games and 5 wins. Their quoted quote, "The best games are won in the pub."

A belated Happy Birthday to Ray Clearwater. Everyone remembers the day when the 120 voice Drawing Room Choir joined in to wish him the best. By way of passing, Ray is not with us anymore — a Christmas graduate.

To close, just one question — what happend in Mechanics, Mort?

*The apple of a man's eye is usually a half-peeled peach.*



## SECTION 4



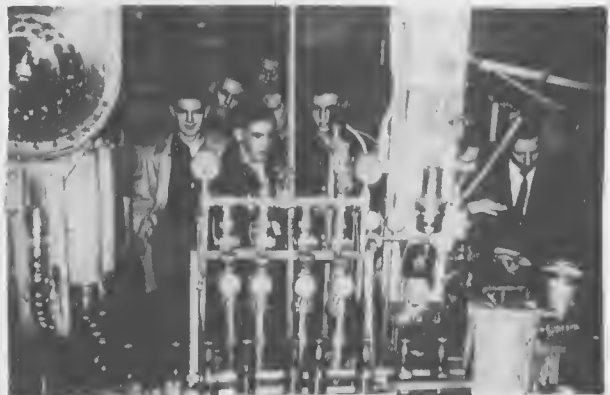
FRONT ROW: C. Johnson, J. Shawluk, A. Goddard, D. McCreath, B. Fowler, J. Olive, J. Pluhar, B. Kraus, T. Bates.

MIDDLE ROW: E. Klemm, K. Stevens, M. MacFarlane, H. Peters, A. Krimmins, H. Appler, B. Rogers, R. Kolt, J. Backman, A. Shaw, P. de Graaf.

BACK ROW: D. Delaney, S. Shepps, B. Schumacher, P. Najda, B. Tinkler, H. Riml, P. Osted, D. Lewis, B. Nicholson, E. Race.

A highlight of the section 4, first year social season was the first annual free-loaders tour of Labatt's brewery. The interest which the trip held can be seen in the photos below as the boys drink it all in. Our hosts were more than kind and supplemented their commentary with a generous sampling of their products. Once again the care and cultivation of the engineer has insured a profit for a brewery.

At last report, more than half of the touring company had still not returned.



## SECTION 5



BACK ROW: J. Thompson, M. Trethart, E. Ray, B. Loewen, B. Nemish, B. Wotherspoon, B. McLaughlin, K. Hibbert, J. Stoddart, T. Ransby, D. Wilson.

MIDDLE ROW: D. Chalkmen, J. Dellevoet, D. Zasada, V. Becker, D. Saramaga, T. Loewen, G. Calder, A. Cornies, D. Miller, R. Locken, L. Jisian, E. Rymek, H. Hackett, H. Taylor.

FRONT ROW: D. Waldman, A. Fenton, R. Peterson, A. Buchanan, J. Wiens, R. Coley, C. Martens, D. Larson, D. Deighton, R. Stromberg.

You can tell a section five man by his intelligent expression, strong masculine appearance, blood-shot eyes and red nose. He is still recovering from the last stag we had . . . oh alouette! Remember the abduction of the U. of North Dakota's Freshie Queen? Certain members of five really engineered this one; L. J. stole the young, beautiful, bountiful gal from D. W., escorted her back to Winnipeg,

where she had the time . . . In Sports five is best — Football, Basketball (Yea Team), you name it. We are ahead in illegitimates too — five so far. Understand the fellows spoke to the Dean the other day about obtaining a card playing period — here's to the days ahead men, days full of wine, women, song and Trig. Profs. like Black.

\* \* \*

"So you're a painter?"

"Yep."

"Paint houses, I presume?"

"Nope. Paint men and women."

"Oh, I see. An artist?"

"Nope. Just paint men over one door and women over the other."

## SECTION 6



Back Row: R. Foster, B. Curren, W. Strange, A. Baderl, J. Mackintosh, J. Tompkin, A. Waroway, G. Ritchie, G. Simpson, D. Eryou, A. Gretzinger, R. Gilmore, M. Pinuita, W. Melko, L. Geoffrey, A. Gretzinger, K. Wiebe, M. Wilkins, R. Galatiuk, R. Cassie.  
Front Row: J. Ruml, J. Toye, B. Rotoff, S. Fleck, D. McKay, A. Lewis, D. Toole, C. Wilson, T. Yells, A. Heinrichs, F. Garland, K. Tupper, E. Nych, K. Slamp.

Section Six has had such a gas of a year that it is necessary to divide our glowing achievements into two categories, scholastic and miscellaneous.

Our stalwarts showed their intelligence early in the year by asking deep probing questions such as: "Could you recommend a good book to learn this course from," and "How long have you been teaching?" However our men never despaired and finally we were exposed to those basic revelations that make a whole course clear. Suddenly it became evident that Calculus was a series of Fundamental Theorems, and that Physics was a series of suppositions beyond the scope of human imagination and that all Surveying was done to the accuracy of all intents and purposes.

Section Six's increased comprehension was soon noticed in a number of ways such as the increase in the coffee-break business at U.M.S.U. However, the final proof of Section Six's intellectual prowess was not in progress examinations at Christmas or in tests from time to time, but rather in our impromptu deductions. It isn't every day that a new Fundamental Theorem in Calculus is presented, and never has there been a problem in area between two curves like the one put forward by Section Six.

Besides participating with wild abandon in all organized and semi-organized sports and other forms of fun and games, Section Six has come up with some capers of its own. Some of the most

ridiculous ideas for stunts yet devised by man. Fortunately most of them were never tried, (Lady Godiva wouldn't have sounded too good on U.M.S.U. Radio) or died early in their infancy. (We couldn't have used all the ash trays from the Armes Building).

The scene now shifts to a cold dark starless night. A large car speeds down a deserted road and stops in front of a grey sinister building. Two stealthy figures emerge from the shadows to help the three occupants of the car to remove the bulky objects in the trunk. Thus under the cover of darkness and in the utmost secrecy Section Six helped spread Christmas Cheer and became the first group in history to erect a Christmas Tree over the door of the Engineering Building. Unfortunately a storm came up later in the night and Section Six also became the first group to have their Christmas Tree blown down.

Our other large scale effort of the year wasn't quite as original but more successful. This was scheduled as our Section Stag but different groups of women kept crashing the party, drawn by our magnetic personalities. The stag was far from orderly and certainly not quiet but nevertheless ended up with only one person in the shower.

The above description should be sufficient to show why Section Six has been the greatest addition to Engineering since the invention of beer.



# SECOND YEAR ENGINEERING

POWER PROM QUEEN CANDIDATE



*Miss Mary Warriner*

## SECTION 1



BACK ROW: K. Copeland, G. Bridgeman, D. Pashniak, D. Keltie, D. Rentz, S. Seniuk, J. Richl, L. Baydack, W. Kauk, S. Kopec.  
FRONT ROW: R. Ford, W. Fisher, R. Solmundson, J. Holmes, A. Lampert, G. Skinner, A. Keating, A. Goyer, D. Swan, H. Uhryn, K. Gowriluk.

Section I, with its members shown above, has to be recognized as the most spirited and active section in second year. Only a few of their mighty accomplishments are mentioned below due to a lack of space.

Sportswise, we have been supreme, capturing the flag football championship of the university for the engineers. Our team, virtually undefeated, trampled all opposition and won the final by an overwhelming score. The volleyball team has defeated all comers with one exception being a powerful, (and lucky),

Civil IV squad. The section would like to have them a rematch if they dare. In all our sports activities we have never defaulted a game.

Debating has been another activity in which we have been active and successful.

The section has had two stags this year. Attendance has been excellent and we have had twenty to thirty fellows at each stag.

In conclusion, the members of section I would like to say that none of the other second year sections can compare to the almighty section I.



## SECTION II



BACK ROW: C. Avery, A. Newman.

MIDDLE ROW: D. Livingstone, A. Snyder, A. Strang, H. Wall, K. Hewett, R. Lynch, D. Underwood, S. Mohammed, B. McCallum, G. Cederwall, G. Lawrence, A. Feuer, T. Pataky, L. Hiley, R. Anderson, R. Greenlay, G. Jorgenson, J. Massery, T. Coxworth.

FRONT ROW: N. Helyar, W. Mitchell, D. Sader, J. McBride, B. Watson, L. Bay, W. Bilozor, D. Schneider, A. Richmond, B. Thompson, J. Lewak, D. Hook.

The year 1960-61 has brought into focus a new power in the halls of "E." Traditionally Eng. II has been known as "poissons morts." The men of Section II have shown the way in creating an "esprit de corps." How many sections or years or (should we say sections and years) can claim the following:

- a. Seven men on the six-man football team.
- b. The nucleus of an Engineering Hockey Team.
- c. Two complete intramural volleyball teams, not to mention a member of the varsity team.
- d. The intramural tennis champion.
- e. The brains of the famous N. Dak. caper.
- f. The highest failure rate of any section or year.



## SECTION III



Back Row: B. Stephens, R. Williams, A. Gilchrist, N. Peitsch, J. Forrest, O. Pedde, M. Warachka, R. Goeres, M. Robinson.

Middle Row: A. Prochuk, H. Wiebe, J. Stephens, W. Jonasson, M. Keelty, B. Russell, J. Anderson, E. Wiebe, B. Hill, D. Lawrence, H. Symonds, E. McComb, D. McKenzie.

Front Row: K. Patino, P. Winslow, I. Thomas, A. Side, G. Chapel, M. Carvey, B. Corkal, L. Duval, S. Swereda.

Reflecting on the class activities for the term, Section 3 will agree that they have been both extensive and amusing. Our two volleyball teams ended the season with a total of 3 wins and 3 losses. The unsuccessful games were due to the loss of our key players—in some cases, six.

Other activities indulged in by Section 3 were the big road race, flag football, etc. . . . a little of everything.

Favourite pre-class sport was that famous game—"sliding of the penny." Big 99, Little Oz, sticky fingers Patino and the "Casa" were a common sight by any table. Rumour had it that, A Side, was

in for trouble—suspected of using loaded pennies. Personal opinion is that Little Oz, should give up the game since his losses have driven him to hard liquor.

Outside activities included our stag at the Eden Roc. Pictures were not included in this article for obvious reasons . . . it seems that several girls happened to be at the stag and . . . However, the tapes were burnt—really a shame since Prochuk could have sold parts as "social security."

At the time of writing, Section 3 is planning another successful orgy, I mean stag, at the Eden Roc for the midterm break.

\* \* \*

*A rich old lady was paying her nephew's college bills and her visitor asked her if it was expensive.*

*"Well," explained the woman, "languages run pretty high. My check this month covered ten dollars for English, twenty dollars for French, and one-hundred and fifty dollars for Scotch."*

## SECTION IV



BACK ROW: J. Stefanson, N. Gault, D. Robertson, J. Wells, R. McGillivray, B. Fleishman, E. Morris, E. Zaleski, P. Ali, D. Snaith, M. Walker, M. Drennan, M. Delbaere, J. Roche, N. Fenton, C. Muir, K. Copeland, G. Lawrence, L. Cox, W. Friesen, D. Vandenberghe.

FRONT ROW: Y. Mak, A. Bolton, K. Holland, M. Melnyk, D. Brown, E. Hyworon, F. Bliwernitz, P. Jacobi, K. Li, K. Chow, D. Tough, G. Morrison, L. Tymkiw.

Ably led(?) by our section president, Don "Big Daddy" Brown, Engineering II, Section 4 has had a very successful first term. We have been well represented in all intramural and interfaculty activities, as well as in many other fields. We have, included among our illustrious group, footballers, basketballers, dabblers, curlers, debaters, volleyballers, drinkers, riflemen, skaters, S.E.I.C. movie watchers, U.N.D. Homecoming Queen kidnapers, drunkards . . .

At present our volleyball team, consisting of "Tiger" Tough, "Wild" Wells, "Flash" Fleishman, (STAR!!), "Wiram" Walker, "Mac" McGillivray, and "Mickey" Keating, is undefeated and, naturally, at the top of its league. We have many avid curlers, among whom are Pete Jacobi, John Roche, Dennis Snaith, and Dick Robertson. Mort Walker, our debating rep, lined up a couple of fast talkers in Walt

Friesen and Lawrence Cox, who were outstanding, (i.e. out, standing) debaters. Section 4 has a couple of Lucas McCains in Ernest Morris and Chuck Muir, two really fast men . . . with rifles. Our sports rep, Bill Herdy, when not running around the UMSU gyms in various stages of undress, can usually be found guarding the nets of the junior hockey squad while his everlasting buddy, Don, claims to be manager of same.

On the academic side, we have a few money winners. The Christmas exams saw Nathan Fenton and Ken Holland come one-two in the class standings.

In conclusion, I would just like to quote a line from one of my favorite philosophers:

"Confucius say; Man who sit on hot stove, burn his britches behind him." . . . Ah so!!!



## II YEAR ENGINEERING PHYSICS

BACK ROW: Klaus Flock, Gord Clark, Robert Frederickson.  
FRONT ROW: Werner Fieguth, Peter Simeon, Saul Freitag.

## NEW STUDENT ORGANIZATION IN ENGINEERING

With the rapid advance of modern physics within the last century has come a parallel advance in engineering to apply these discoveries to the benefit of humanity. More students every year are heading toward the communications end of electrical engineering and upon reaching their final year they find approximately 25 separate divisions of electronics to proceed with whether they be inclined to post graduate work or industry. A state of confusion is now upon him, "Which should I choose to apply myself to?" he may ask himself.

With this in mind the Institute of Radio Engineers has installed a student branch into many qualified universities to help the student decide this problem

by providing him with a sampling of each through various media: The IRE Student Quarterly, the monthly proceedings of the IRE (known throughout the free world as the most informative of all such manuals), as well as live speakers, demonstrations, tours and movies.

Once a student has decided which of these branches of electronics he wishes to devote his career to, he then may join one or more of the professional groups after which he will receive proceedings from these groups relating directly to the topics he is most interested in.

If you are planning to enter electrical engineering next year keep the IRE in mind. It may help you decide your future as it has for many in the past.

DON ANDRUSHKO,  
Vice-Chairman,  
University of Manitoba Student Branch,  
Institute of Radio Engineers.

### III YEAR CIVIL



Back Row: B. Drysdale, B. Purdy, L. Chandler, P. Feschuk, W. Rooke, G. Smith, S. Kawalec, W. Randell, G. Weibe, R. Kirshner, B. Niven, B. Newbury, J. Witherspoon, W. Tibelius, J. Bogdonov, D. Bishop, D. Johnson.

Middle Row: P. Rebizant, D. Ross, M. Kostelnyk, B. Ripat, D. Murphy, B. Chaboyer, D. Scott, A. Pick, R. Roziere, C. Howard, N. Lyons, M. Hirt, R. Steele, K. Kaminsky, G. Bray.

Front Row: R. Roscoe, D. Johnson, R. Gittens, J. Francis, T. Wignall, W. Kochuk, M. Schjerning, D. Ramsay, T. Keenie, J. Jorgenson, C. Larway, L. Foster, B. McKibbin, H. Brown, B. Avis.

That illustrious assemblage of intellects in third year Civil Engineering have again led the Engineering Faculty to greater things. Socially, the 3C stag was an overflowing success, with consumption at a record high, (see illustrations below). When called upon to toil for the March of Dimes, the Red Cap men responded magnificently. Due to their appeal to femininity the men of 3C were able

to collect a veritable fortune for charity and leave behind many happy U of M females, clutching their tags. Undoubtedly, congratulations will soon be forthcoming to the 3C's for designing and constructing the winning Snow Carnival sculpture entry. All members of 3C should enjoy unequalled success in any future endeavor, as well as glorifying the Faculty of Engineering.



## III YEAR ELECTRICAL



BACK ROW: John Ross, Ed Rokosh, Ken Ritchie, K. Ouelette, A. Zerbin, Wally Karbonik, Bob Borbridge, Keith Brickman, Gary Koreen, Barry Gordon, Frank Pickersgill, Dennis Ayden, R. Jell.

CENTER ROW: Harvey Feingold, J. Kelly, Bob Kennedy, D. McCall, C. Cho, Frank Ramlal, Jack Richtik, Al Macatavish, D. Delgatty, Glen Martinson, J. Kopec, Z. Stepchuk, Bill Brook, Carl Griffith, R. Laffin.

FRONT ROW: Ben Luffman, R. Curtis, C. Krahn, Victor Steciuk, H. Koven, Gordon Davidson, Ken Peebles, Don Andrushko, Alex Burstein, David Minuk, W. Badger, Gary Mroz.

Electrical engineering is fast becoming that division of the engineering faculty which draws the most students for their final two years in engineering. The reason for this may be the profitable future for all those involved in this field. Hence, you will find many a conscientious student in the class.

However, the students are not always bookworms. Stunts are in order such as the redecorating of architecture's structures.

Other extra-curricular activities participated in by the class are flag football in which the IIIE participants advanced to the semi-finals before losing to another engineering team. Also, members of the class are present on engineering volleyball and hockey teams.

Concerning individual performances, Gary Koreen placed second in the downhill event of the varsity ski meet.





### III YEAR MECHANICAL



BACK ROW: P. Coinner, E. Graham, L. Crosthwaite, B. Callum, W. Sorby, R. Deyell, T. Weeks, R. Baturin, R. Johansson, A. Bergman, N. Blaine, R. Adam, F. Clancy, K. Walker, D. Deagle, K. Halsall, D. Howell, B. Dykes.

FRONT ROW: B. Harasyn, W. Schmidt, R. Buss, R. Kesten, W. Maclean, H. Folson, E. Schroeder, R. Chalmers, E. Fromyhr, H. Mielke, J. Ziyone, D. Kroeker.

The boys of 3rd M. have had a very good year. Our organized stag was a bash held in a padded beer-proof motel suite. Refreshments were served. A revival of an animal show failed to materialize which found some of the boys hopping around like a certain species of toad. It was generally agreed that coffee pots made good beer steins, that Norm's wife is poor, and the profs. are okay guys.

Less organized pastimes abounded, some being extreme — for instance Earl Fromyhr got married. Also classroom curling was highly developed with three sheets operating and an expansion program well under way, and occasionally we of 3M studied. After all, all play and no work makes Jack a dull ARTSMAN.



# GEOLOGICAL ENGINEERING

POWER PROM QUEEN CANDIDATE



*Miss Pat Spurgeon*

### III YEAR GEOLOGICAL



Jim Marshall, Verne Rampton.

Firmly believing in the Darwinian theory of the survival of the fittest, the G.E. class of '62 have little faith in the current rumor of an extinct species. Quality not quantity is our motto and this year was no exception. Mr. Rampton continued his illustrious athletic and social career with a number of outstanding achievements, (too numerous to mention

and some not worth mentioning), while the other half of the class continued to meddle in university politics and operate his distributing agency for "See" jobs. Both members of the class are on the U.M.E.S. council and have maintained their standard of . . . 100% or nothing!

### CLASS PARTY





Here

and

There



# CIVIL ENGINEERING

POWER PROM QUEEN CANDIDATE



*Miss Dorothy Wallace*

## Civil Graduates

### KENNETH M. ADAM

Refugee of Fleming, Saskatchewan. Better known as the "Moo o-o-somin Kid." Can't attend Big "P" until after convocation, (under 21). Active in sports and other nightly entertainment. Brilliant economist — uses car pool horn as an alarm clock. Future as a cfs man — post graduate probably.

### AVIE ARENSEN

"Blondie" came to IV C by way of Kelvin High School, and the Science Faculty. He has a wide range of interests including curling, beer, volleyball, beer, football, beer, philosophy, beer, debating, beer and also takes a drink now and then. An active participant in all class functions and is Treasurer for the S.E.I.C. His future, undoubtedly a promising one, lies in developing his own business, and future marriage.

### W. T. BAILEY

Spent 2 years in architecture with intentions of completing both courses in Architecture and Civil Engineering but now if time permits will try to complete a post-graduate course in structural design depending on marks. Is married as of one year and intends to practice in Canada. Carried out graduate thesis on steel theory.

### FRANK BEST

Frank believes firmly in verbal conflict. He is active not only in formal inter-faculty debating, but has often been seen arguing with professors. His record is consistent though, never having won either. When he isn't home giving a bottle to his baby daughter he can always be found at the "P" taking a few bottles himself.

### ROD BOWER

"The Great Pumpkin" is the room organizer. His size and ugliness make him a terror on the football field (with the Bombers and the Canadian intermediate champs), the basketball bench (Varsity Bisons), the golf links, volleyball court, and hockey rink (IVC AnkleRunners). Rod intends to get a "Dear First Choice" letter, a bachelor apartment, a stereo set and all that goes with them.

### ALLAN B. BOYCHUK

Exile of Rossburn (Manitoba?) but claims he left voluntarily. Governor-General's Medalist in 1956, first year Scienceman, then saw the light. Has attained a great skill at sleeping throughout the first period despite numerous distractions. Future not decided, but possibly Engineering.

### F. F. BROWN

After a year with the working class, Frank decided that there must be an easier way. He seems to have found it. Frank should be a success wherever he goes, if not at Engineering, there's always a card game. Probable future with Shell Oil.

### RON BUCHANAN

A graduate of the Neepawa Collegiate Institute, Ron turned to Engineering after a year in Science. "Dunc" is a keen curler, energetic sportsman and strives for perfect attendance at the Friday Afternoon Club.

### KEITH BYRAM

Mr. Byram, noted Civil Engineering reprobate, is the originator and President of the Friday Afternoon Club. He is noted for his abilities as a highway designer and radar defenceman. Future plans include early retirement on the French Riviera.

### DON CHARLESON

Don calls Brandon his home. He divides his time equally between books and nurses. The handsome rugged type, he will probably go through life building better turnpikes for the Highways Department.

## Civil Graduates

### RICK CHASE

"Rick" is a member of the S.P.D. clan and a bathtub sailor who is Mess President of the untidies. A questionable student and a great guy (to hang in the closet), he will definitely go places if he ever gets out of bed. Only claim to fame is a terrific girlfriend. Future—Post Graduate work.

### DOUG CHIVERS

The volleyball king of the Class, Doug is a sturdy zete. His fiance claims he spends his week in studies, but our hairy piper is usually found relaxing in the lab. One of Al Capp's refugees. His future calls for immediate marriage and all the rest of it.

### ISADORE COOPER

A graduate of St. John's High. Izzy is married and has a son. He is an ardent curler and bowls for laughs. Future appears to lie in the Hydraulics Field.

### GORD CRABTREE

One of those quiet, sensitive guys IV C abounds in. He keeps his opinions to himself and is extremely modest — rightly so. Very active in sports, excelling in golfing and curling. He is our Athletic President but is better known as an Engineering Type Ballerina. Future interest—to further his education and Blackhawks winning Stanley Cup.

### JAMES A. CRAN

Jim's an amiable fellow who graduated from D.M.C.I. Actively participated in intra-mural basketball and volleyball. An ex UMES Council Member; President of Sigma Phi Delta. Future Plans: Post-graduate studies in Theory of Structures.

### JIM DEMPSEY

After four years of persistent but fruitless search for French beauties from St. Boniface to Shawinigan, Jim is now preparing to go to Moscow by taking Russian IA in Arts. Sincere wishes for his success there.

### HENRY DERKSEN

"Dusty" is a representative of Morris, is an oppressed former. However, he expects to be a good injuneer someday, despite the fact that he stays up all night, and rests during the day (in class of course). He is active in curling or is it girling?

### DAVE ENNIS

"Wee Davey" hails from McCreary (wherever that is). Active member of T.K.E. fraternity and compiler of straight "C" index, when not at the Pembina. Favourite colour: Brown. Future: counting rivets for Dominion Bridge.

### D. FARLINGER

"Farley", West Kildonan Collegiate, Sports keener, summers spent straightening Winnipeg streets to cut down on car pool expenses, Phi Kappa Pi President. Future — promising, but uncertain.

### DAVE FRASER

Dave is our likeable bachelor who came to the University by way of St. John's College. The International Airport and ham radio is Dave's side interest. He has not yet decided on a future position but a trip to Europe is in store.



## Civil Graduates

### VIC GALAY

Known as 10/10 Galay, a product of Beausejour and a good man to "C". Can usually be found trying to sneak big brown books out of the library. Favourite expression: More or less. Future: Post Graduate work.

### BRIAN GROVER

Must rate as one of IV C's most talented performers. In spite of all misleading outward appearances, this boy still manages to maintain an honour's average. A self professed outstanding athlete, Brian has been known to excel in Football, Basketball and Hockey. Brian claims a seat on UMES Council as S.E.I.C. Chairman, pulls a few strings for the D.U. frat and swears he is no relation to Sergeant Bilko. Future—Masters in Hydraulics.

### RAY HAAG

"Ragman" is one of the trouble makers in IV C, always picking on the little guys. He has fantastic volleyball form and excels at the great sport of "C-jobbing." A member of DKE, Ray can hold his own around the bottle opener and has enough girls on the line to start his own sorority. Has ability—will succeed.

### BRYAN HEPWORTH

"The friendly C & B man." "Hep" claims he graduated from D.M.C.I., however, this school denies it. Eyes always light up at the mention of Pembina. He spends his summers flying with the R.C.A.F. and anticipates a future in this service.

### CLARENCE JACK

One of the quiet, well-behaved boys of the class principally because that's where he sleeps it off. His rise to notoriety was proportional to the noise made by broken beer bottles as heard and acted upon by the Dean of Residence. Future—Chief Engineer of Strathclair.

### GARTH JAMES

"Gar" is the proud father of a baby daughter. Even though he won't admit it, his wife says he studies at times. When he's not playing sailor as a Sub-Lieutenant in the RCN(R), he can be found playing basketball and volleyball where he's dubbed "The Punch." His keen wit and warm humour will find a great future in the construction field.

### W. B. JOHNSON

"Bax" is a recent member of the married clan and an earnest member of the DKE Fraternity. Active in tennis and golf, his services are also found in basketball and volleyball when he's not grinding. His future will be found in the Highways Department.

### ROY KLOPP

Possibly the most popular student in the class, Roy delights in evading professors. His wide range of interests include girls, basketball, booze, pranks, girls, debating, booze, football, parties, girls, flying and booze. In past summers, he's worked as a jockey, a flagpole sitter, and most recently as a test pilot for Seagram's V.O. His good marks, winning personality, and toothy smile make him an ideal salesman, so he'll probably spend his life working in research.

### AL KOHUSKA

This former school teacher is one of the fathers of the class. Although he participates in numerous activities, he manages to maintain a high average. He is assured of success in whatever field he chooses, even if it is designing perpetual motion beer glasses.

### ALEX KULUK

Alex is a former graduate of St. John's High School. He excels in soccer and basketball and performed on these faculty teams. Noted for high marks and hard work. He has no definite plans for the future.





## Civil Graduates

### STAN KUSTRA

"Old Stash" always dispenses "don't worry" advice but has grey hair. He set the example of a balanced University life with equally unimpressive academic and athletic achievements. Future—bright, provided that he gets his inheritance.

### ALLEN M. LANSDOWN

Graduate of Glenlawn Collegiate. Shines at the top of his class and a recipient of many scholarships and honours. (Governor-General medalist, Isbister and Mobil Scholarships). Known to car pool members as the "toast crumb" kid. Plans post graduate work in bridge work.

### GARY LOCKER

The "Lock" has the key to a pleasant life with ale (Labatt), cigarettes (Buckingham) and the finest collection of skin pictures (Playboy) in Residence. In spite of extensive Westernizing he worships Kenora and prays for a job from Ontario Dept. of Highways. Future—rodman and wife.

### VICTOR LYSACK

Vic's home town is Swan River. A quiet person who takes his studies seriously. Spent two years in Agriculture before coming into Engineering. Interests and hobbies include: music, photography, archaeology, rifle club and fishing. Future plans: Include a Master's Degree in Business Administration.

### BOB MACDONELL

The red-headed animal from IV C who still wears his high school sweater to boast about his past achievements. Robert is a "curler supreme" who also dabbles athletically in volleyball and badminton. He wants one thing out of life — security, and marriage. Future—permanent junior engineer with Shell Oil Company.

### ELMER MALAKOFF

One of the "star" athletes from IV C, he excels in hockey, soccer, volleyball and ping pong. Elmer's best vocation should be that of a typical absent minded professor. All IV C waits for the day Elmer forgets his pants and comes in his "gotch." Definitely executive material (he even gets along with Dorothy). Elmer is undecided on his future plans.

### BILL MANN

A native of Stonewall, has joined the ranks of the "home makers" since starting with the Civils. Ardent hockey player, member of the T.G.I.F. club and all around "keener." Ambition: To keep his wife working. Future: A working wife and post graduate work.

### HARRY MARTEL

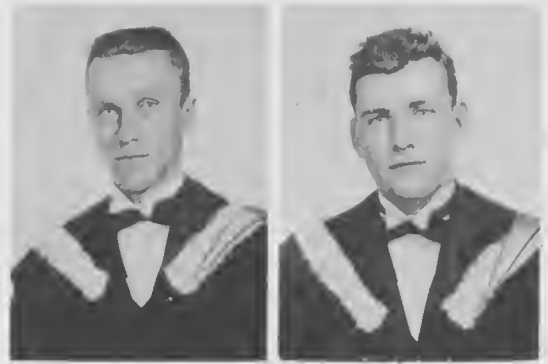
"Happy Harry", President of "The Five Year Club" originally hails from the bustling Metropolis of Rosenfelt, Manitoba. Famous for his many futile attempts to obtain highways, notes and bashes at his C. Ave. Abode. An expert curler and golfer, Harry's future looks rosy—possibly bottling saki in Burma.

### WALTER MILLER

Hails from St. Boniface via Provencher Collegiate. Enrolled in 5 year plan and always game for coffee and fun. Married last summer and never made it on time for 8:30 class again. Member of Debating League & Pembina Club. Future—post grad?

### JERRY L. MOSKALYK

A graduate of St. John's High School, Jerry believes hard work begets success. His activities include volleyball, soccer, bowling and arguing with A.K., M.R. and D.V. His future plans are not definite.



## Civil Graduates

### ALF McCABE

A Port Arthur native son, Alf has been here since high school at St. Paul's. Hard working between coffee breaks, Alf has found time for curling and football. Engaged, Alf plans to settle in the Winnipeg area.

### KEN NIXON

Graduated from Norwood Collegiate in 1957. Has shown a decided increase in marks over the past four years until now he is one of our top students. He has taken a position with Shell Oil, but is as yet, undecided about post-graduate work.

### ED PENTLAND

Graduated from Glen Lawn Collegiate or rather discharged from Glen Lawn Collegiate after 3 years. Takes enough interest in extra curricular activities to know that they exist but not enough interest to participate. Future as yet undecided, but with his smiling personality he can't go wrong.

### RALPH PENTLAND

Graduated from Glenlawn Collegiate in 1957. He has kept fairly good marks for all four years in spite of bridge, chess and hockey. Future as yet undecided, but should do well in chosen field.

### BOB PETRI

The flying Dutchman was one of the Kildonan Canoe Club rebuilders, participating in every sport except canoeing. He likes beer, trips up north, beer, V.W.'s, skiing, and the odd beer. A good guy whose success is assured, intends to travel around the world in 80 days.

### HAROLD RAWN

"The Moose", earned his membership in the Dirty Old Men's Club with a thesis on supported and unsupported structures as seen in the residence girls' chow line. His plans to do further research work in his car ended when it was hit by a telephone pole. Future — good, if demand for engineers is desperate.

### GARY REED

Can be found in the employment office asking, "Why don't they want Civils?" Gary has ventured into the fields of 6-man football (Allstar), debating (Failure), UMES (treasurer, vice stick, UMSU rep). Comes from the "marks don't make the man" school of thought. A KSK, he is madly trying to make athlete of the year. Future: Mobil Oil production.

### BILL REID

Right auger Reid, a graduate of St. James Collegiate, Bill has been active in UMES council for 3 years, this year as Sr. UMSU rep, sports, volleyball and basketball. As an SPD, he is interested in all faculty activities. He likes booze, trips to Fargo, and competing with professors during lectures. TV watching is restricted to Mike Hammer commercials. Future: Marriage and post grad in soils, in that order.

### GEORGE REMPEL

Originally from Morris, Manitoba, entered Engineering with Man. Breweries & Hotelmen's Assoc. scholarship, (Breweries expect to break even on this investment in near future). One of the "pro" curlers in the class. Has obtained excellent marks and success should be his in the field of his choice. Future possibly with Shell Oil or post-grad work.

### MIKE ROMAS

"The Baron" hails from the north end and is a graduate of St. John's Technical High School. His many interests include golfing, curling, and bowling. His future lies in the structural design field.

## Civil Graduates

### JAKE RZONCA

A recently married, therefore still jolly, little fellow who came here from United College, is known mostly for his muscles and his craving for cards and dice. Besides all these activities he has still managed to obtain fair marks and success is assured in whatever he tries.

### DAVE SEXTON

A St. James Collegiate graduate, Dave is another of the boys bothered by nurses. He has obtained his commission in the militia as a full lieutenant. Between curling and hunting he finds some time to study. He says he broke his fingers playing football. His present ambition is to go on a pub crawl down Portage and get Brown to buy.

### KARL SNIDAL

Steep Rock, Manitoba's contribution to Civil Engineering. A member of the Friday afternoon club, Karl's future includes a post-grad course in diaper changing.

### BOB SOLOHUB

Solly received his high school training from Isaac Newton and has managed to graduate after 4 years. He has been an active member of SPD fraternity and spent 2 years on the UMES council. For some unapparent reason he finds an attraction in Winnipeg's hospitals. His possible future lies in traffic control with perhaps post-grad training at UCLA.

### GERRY TENCHA

Gerry, one of the four year men, comes from the thriving community of St. Norbert. He is a member of the engineering hockey team and should get a lot of cheers from a certain female friend of his. As an Engineer, he should do wonders for the Fort Garry sewerage system.

### RAYMOND TIDE

Product of Neudorf, Sask., (Sec. A, Tp. 21, Rge. 6, W-2nd). Member of ROTP and hopes to see Europe. A keen student and winner of R.C.E. Memorial Scholarship. Future is three years with Army Engineers, then post-graduate work in structures, or vice-versa.

### RON TRIFFO

"Triff" came into Civil via Viscount Alexander. The majority of Ron's spare time is spent playing hockey, convening flag football, partaking in basketball, volleyball, and curling, and the rest of his time with TKE fraternity and a particular female. Future ambition is to replace Jerry Hiff with urban development as a sideline.

### DON VANDUSEN

"The man from Makinak" entered engineering married and armed with an arts degree from Brandon College. A faithful member of the Friday afternoon club, Don's future lies in designing canals for the Dept. of Agriculture.

### DON WILSON

"Willie" possesses the only "feather duster" in IV C, probably in an attempt to escape the birth certificate routine. Second principal pastime spent in evading the LOVELIES of General Hospital. Future plans are definite, three years supervising ditch-digging for the army engineers.

### ALFRED WITTENBERG

Originally from Seven Sisters, Man., Alf came here after taking his senior matriculation at C.M.R., Quebec. Besides his ability with cards, he has still managed fair marks. Plans future in construction, possibly with Ontario Highways.



## Civil Graduates



HOWARD YOUNG

Howard, "Have gun — will travel" Young has proven his skill as a member of the rifle club. He shoots for good marks as well as good targets. His skill at chess has made him champ player of IV C. Howard will make a good engineer, if the nurses let him.

## Geological Graduates



GARY PEARSE

Geological Engineering's contribution to duck and girl hunting. Noted for his "fall" beards, pumpkin rum, and aromatic pipe. Last seen entering the St. James Pub. Future—Post graduate work.

FRANK RENDER

Well known sportsman, big time spender and long time prospector. Frank, a science graduate decided to join Geological Engineering in order to gain admission to the Friday Afternoon Club. Plans a life as an oil geologist on Baffin Island.



TED ROBINS

Fort Garry's latest engineering rock artist is a keen flyer and unsurpassed expert on female statistics. Ted is noted for his spontaneous parties and completed assignments.

# MECHANICAL ENGINEERING

POWER PROM QUEEN CANDIDATE



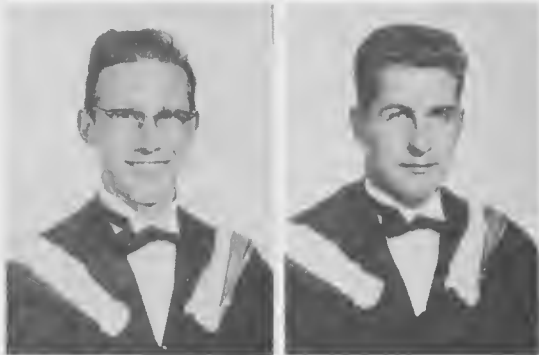
*Miss Myrna Appland*

## Mechanical Graduates



### STAN ATTERSLEY

Mr. Goren of IV M and a Sigma Phi Delta fraternity member. Can be seen playing bridge, dreaming bridge, or kibitzing around the bridge table. Leads partner to slam with three points in hand. Future: Sales Engineer for playing card company.



### DAVID BANKS

A native of Benito, Manitoba, Dave received his high school education in Benito and at United College. Active in sports, Dave is publicity chairman on UMES council. His future interests lie in the heating and ventilating field.

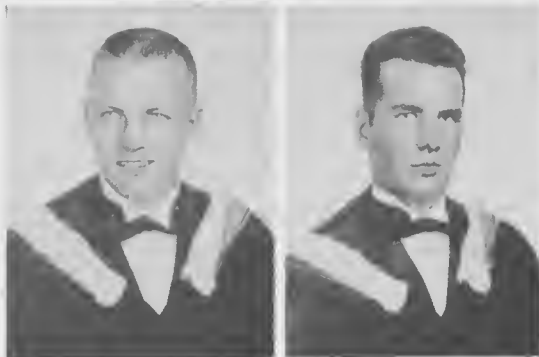


### JOHN BUCHANAN

Better known as "Bucky", he is a native-born Winnipegger who started his U of M adventure at United College. After spending the summer working in the U.K. with frequent Parisian side trips, he is a connoisseur of European night life. Ambition: Chief Engineer of a Trinidad Rum Factory.

### PAUL CANTIN

An active member of the Aeronautical club, and can often be found testing the latest theories in the IV M lab. Runs the earliest and most crowded carpool in Engineering. Married, but doesn't prevent him from being active at the "Big P." Future: Working for Polymer in Sarnia, buying a hot Karmen Ghia, and raising children.



### BILL CARDIGAN

A native of Winnipeg, Bill attended Isaac Newton School here. Bill is a charter member of the Sports Car Fanatics Club IV M. When not grinding Bill can be found engaging in the quiet, regular, IV M card games. Ambition to organize the Grand Prix de Winnipeg.

### GORDON CHAN

The silent and seldom seen member of IV M, Gord entered Canada in 1952 from Hong Kong, and received his B.Sc. (General) at the U of M in 1956. Worked like "H" the first three years of Engineering so he could take it easy in fourth. Future: indefinite yet, but post graduate work later for sure.



### DAVE CROSS

One of the real nice guys, Dave hails from Kelvin where he was school President. He is a member of the DKE Fraternity and has been very active in intramural sports. Future: to spend his time basking in the sunshine of matrimonial bliss—he thinks.

### ROBERT CURTIS

Devlin Ontario's contribution to IV M. Bob's favourite pastime is tramping through the wilds of Northern Ontario felling all the trees in sight with his trusty chain saw. Bob gained some degree of notoriety as last year's class president and leader of III M pranks. Future: efficiency expert.

### RONALD FINLAY

A local boy, Ron came to us via Viscount Alexander. A top student, Ron should be a prime contender for the Gold Medal. He is considering taking post graduate work, but first must master how the venetian blinds work in the Engineering building.

### MELVIN FISHER

From a farm just west of Dryden, Ontario, Mel came to the U of M to confuse the Profs. Mel's summers have been spent working in the Chemical Department at the Dryden Pulp and Paper Company. He is currently engaged in high priority, high altitude research with "It'll never get off the ground" Kaethler. Ambition: to fly.

## Mechanical Graduates

### TOM FOX

Came to the Engineering Faculty from Balmoral via United College. Tom is one of the few to stick with Residence life for four years. He is an artist in his own right, a member of the TKE fraternity, and a telephone user. Future: post graduate work.

### RONALD GARDNER

Ron entered the Faculty of Engineering after spending a number of years in the Engineering field. A classroom front row enthusiast, Ron is one of our married men. Future: undecided.

### RON GLASMAN

A graduate of Russell Collegiate, Ron worked at the Royal Bank of Canada for two years before coming into Engineering. The slow pace at which he walks is deceptive, because he is conscientious and thorough in his work. His summers at Thompson and Lynn Lake have interested him in heavy machinery as a future.

### CHARLES GUSTA

"Chuck" hails from Selkirk, Manitoba, where he attended Selkirk Collegiate. Sportswise, Chuck is a member of our illustrious volleyball team. Currently he is busy trying to generate plasma, what for no one knows. Future: Master's?

### WILLIAM HALCHUK

Bill hails from Transcona, Manitoba. Manages to grind in between his frequent trips out of town (girls?). His future plans include to stay single, own a new Pontiac and to make the C.N.R. run on time.

### DENNIS HALLER

Being one of the married men of IV M, Dennis usually behaves himself. He is a member of the Zeta Psi fraternity. When the rest of his group are yelling at the tops of their voices, he sits back and waits for the smoke to settle, (as a leader should). Future lies in sales.

### HARRY HALLEWELL

Hails from Canora, Saskatchewan. A very good curler, he won many prizes (booby). An avid noon hour bridge player, he spends his spare hours flooding the Mechanical Lab, trying to get his control thesis finished. Future: counting light bulbs for Northern Electric.

### ALAN HAY

Al spends his Christmases at Foxwarren, Manitoba. He is a member of Phi Kappa Pi fraternity and participates in hockey, football and curling. Can't wait for Spring so he can try out his inboard engine boat design. Future: construction field preferably outside Manitoba.

### JOHN HERMAN

Hails from Sifton by way of Dauphin Collegiate where he won the Governor-General's medal. John is a well-seasoned bushman having served four years in the North with the Geodetic Survey of Canada. He is jolly and easy going, taking blackflies, grizzly bears, bedbugs, and women equally calm in his stride. Future: to start from ground level in aeronautics.

### HARRY HILL

One of the few married members of IV M, Harry joined the group after spending several years in the Air Force. His favourite sayings which change frequently and are mostly unprintable, can be heard ringing throughout the Engineering building, especially when he's losing at cards. Ambition: the aircraft industry—what else?



## Mechanical Graduates



### HAROLD HOLROYDE

A member of the Delta Kappa Epsilon Fraternity and Inter-Fraternity Council representative. "Mac" is an ardent sportsman, participating as coach, convener and player of the Engineering football team, in volleyball as a member of the "Illustrious Golden 6" and in hockey. Finds studies interfere with sports. Favourite expression "It's coffee time." Enjoys singing spirited fraternity songs. Future: undecided, but East.

### DENNIS HOSFIELD

Comes to us from Lord Selkirk. Has spent the last four years attempting to learn bridge. Some difference of opinion exists as to whether he has been successful or not. At the moment his future looks unavoidable.



### RALF KYRITY

The "Zorro of IV M", Ralf is a very active participant in University fencing. The bravest student in the class, Ralf can be seen driving his motorcycle to campus every morning, 20 below or not. A female fancier, methinks he keeps a cute little companion in the sidecar for those cold mornings.

### CLARE LYALL

Came to the Engineering Faculty via Glenboro, to take on the better characteristics of a good Engineer immediately. Clare's hobbies are terrorizing Residence dances, participating in the activities of the Charlie Club, and girls. Favorite sayings are all classified. Future: Royal Canadian Air Force.



### RUDY KAETHLER

Known as "It'll never get off the ground" Kaethler. A keen student and a regular member of the IV M wolf-pack at the residence dances. Sports activities include starring on the class volleyball team. A Winnipeg boy, Rudy plans to enter the petroleum field with Imperial Oil Limited.

### CHARLES KELLNER

"The brown banana" is the shy, silent member of IV M. Lost his A.A. card on trips to Dryden, O'Keefe's, etc. Member Zeta Psi, past Engineering Secretary, and social chairman, inter-fraternity sport. Thinks he's "Mr Clean" but will only end up counting soap chips for Proctor and Gamble.



### AL MAZUR

A St. John's graduate, Al is frequently referred to as "Rabble-Rouser" by his classmates. During the past summer he helped the Health Department check the pollution problem in swimming pools. Future: undecided.

### LAWRIE NICHOL

After fleeing Wawanese High, Lawrie joined the notorious ranks of the Engineers. He participates in all the extra-curricular activities that help to make Engineers famous. A profound lover of nature, his favorite subject is two legged mammals of the female species. Future: undecided yet but it should be a success.



### DANIEL OLEKSIUK

"Big Dan" is an outcast from St. John's high. Full of wit, intelligence and good manners, "Curly" will go far in the dust collecting field (i.e. Dustman). Favourite expression: "Hey May."

### TERRANCE PARTRIDGE

Another Kelvin graduate, Terry was Engineering's quarter-back in six-man football. He is a keen competitor in all sports, and this year was the Manitoba representative for Engineering. An enthusiastic party man, he is a stalwart member of the Friday Night Club. Future: designing crash-proof cars for Urquhart.



## Mechanical Graduates

### TOM PATTESON

Tom is a graduate of Kelvin High School and a real sportsman. Of the many sports he takes part in, hockey is his favourite. A married man, Tom is the proud father of a baby girl. Although he may mumble something about "I should have taken Civil" we're glad Tom decided on Mechanical. Future: not definite yet.

### ALLAN OUACKENBUSH

Came to U of M from Lakehead College. Spent his first years down town but moved to Residence in his final year where there are less worries and more women. Activities: curling, flag football, rifle, and keeping his bucket of bolts on the road. Amiable and well liked, Al is sure to succeed in any endeavour.

### DON REITLO

The Flin Flon milkman somehow finds time between bridge and curling to pass every year (and near the top of the class to boot). A married man, Don promises to be another Schaum's graduate. Future: unknown.

### LAWRENCE ROMANCHUK

Comes to us from Old Kildonan. Besides his studies he seems to find enough time for the girls. He has a problem—staying single. Future: working for the C.N.R. and investing in a life membership in the U.N.F. Club.

### BEN SEMCHUK

A native of Winnipeg, Ben attended St. John's High School before entering the University of Manitoba. Married, his future plans are undecided.

### DONALD SMITH

Don came to Manitoba from Upper Canada College in Toronto. Alias "cow-eyes" an ardent football and hockey player, President of the Phi Delta Theta Fraternity, and appreciative of the fair sex, he plans a future in market analysis.

### BOB SPARROW

"The Bird" is a member of the Sigma Phi Delta Fraternity and a keen sportsman. He and one of this frat. brothers teamed up to make one of the most feared and fearless twosomes in Engineering. Future: feather bed manufacturer. .

### TED STAIR

Our inside man at O'Keefes, Ted is one of our keener bridge players. He also shows a considerable interest in aerodynamics (the paper variety). Currently spends his time trying to dry paint. Ambition: to be in charge of production for the O'Keefe organization.

### KENT TRUSS

Hailing from Brandon, Kent attended Brandon Collegiate and Brandon College before coming to the U of M. It's said that his auxiliary profession may be barbering. A good student, he may often be heard threatening to head south. Future: nurse's aide?

### HARVEY UNDERHILL

One of "Umsoo's" regulars, amiable "Overdale" is another member of our married crew. Harvey is presently wondering what makes elevators go up and down. Future: return to Atomic Energy of Canada if possible.





# ELECTRICAL ENGINEERING

POWER PROM QUEEN CANDIDATE



*Miss Beverly Yutila*

## Electrical Graduates



### JOHN HEBERT BARNETT

Dad of IVE, has 3 children. Graduated from Kelvin. Worked at M.T.S. before coming to U. of M. (figures he should have stayed there). Wants a job around Kenora. Participated in hockey, volleyball, flag football. Fourth year was his collegiate year.

### ANDREW G. BEREZA

This vivacious, good humored redhead has a remarkable talent for compressing the work of an entire term into 3 weeks. His interests range from the Fourier Integral to girls. Is currently writing a book: "Engineering for fun and profit."



### S. MAX BOYACHEK

Source: Portage, most of the time. Summer activities: Logging, Oil Exploration, Tobacco Priming, N.E. U. interests: harrier, piano, religion, badminton. Pet Expression: "Everything is for the better." Future: electronics, excitement and the east.

### CARMAN WILLIAM BRIGHT

Hometown, Sinclair, Manitoba. Member in good standing in the Root Loci Club, Grinders Club and TKE fraternity. Survived four years of residence without even having to participate in a raid on women's residence. Writes up lab reports by himself, yet! Future, as his surname, post grad next stop.



### D. GEORGE BUCHANAN

One of the married members of the class, George is a charter member of the "non keeners." Is usually about 5 minutes late for each class, lab, etc. Despite this he is very successful academically, and plans to spend next year taking post grad.

### MYRON E. BULAWKA

Entered the U. of M. from Isaac Newton High School in '57. A staunch supporter of the Root Locus Club in electrical engineering and attended every meeting held in lecture theatre "P." Hopes to design radar and microwave equipment.



### JOHN C. CHAN

Student from Wan College, Hong Kong. I think the Winnipeg weather is just terrific; of course, quite different from the semi-tropic climate of Hong Kong. Likes swimming, playing badminton and going to concerts.

### LAWRENCE CITULEC

Comes from Miles Macdonell High School. He spends half of his time travelling to university from the village of East Kildonan. His prime ambitions are passing his exams and marrying a schoolteacher so he can take post graduate work.



### MORLEY COODIN

Morley was born and raised in Winnipeg. He is an Ex-artsman who was looking for greener fields, and being intelligent, obviously chose electrical engineering. Besides taking a keen interest in politics he is a fanatic supporter of nuclear disarmament, (claims to be able to dismantle anything from a hand grenade to a hydrogen bomb).

### WAYNE COOK

Treks in everyday from the wilderness of Charleswood. Attended Charleswood Collegiate. Believes there is a great future in professional curling.

## Electrical Graduates

### K. COURAGE

Native of Winnipeg and a graduate of Churchill High School—1956. Member of SA fraternity. Ambition: never to drive a Hillman. Taking communications option.



### LEE COX

Came to the big city by way of Swan River. Lost his bachelor status during the summer of '60. Wife, being a school teacher does all his homework. He does hers, washes floors, etc. Future: design automatic floor washer, electrical, of course.



### LORNE DUNN

Native of Winnipeg, attended Lord Selkirk High School. The remainder of his past has been censored as UNPRINTABLE. Future: Northern Electric in Montreal and possibly post-graduate work. A wife in the near future?

### BARRY J. ECKHART

This "ham" hails from Flin Flon but will soon emigrate to Montreal and Northern Electric Co. Was president of the ham club and treasurer of the IRE for two years. His one weakness, whitefish livers fried in butter.



### DAN GUSHE

A "great north-ender" from Isaac Newton High. Likes to contemplate the future through a frothy glass at the pub. An ardent supporter of the "root locus club." Will travel.

### SANDY HELMAN

Chairman of the IRE, he has been busy with his Cardiac Pacemaker. Alumnus of SAM, he leaves for Philadelphia to study bio-medical electronics in June. NOT a member of the root locus club — never been close to the jw axis.

### ED HILDEBRAND

Although a native of Winnipeg, now hails from St. Catharines, Ontario. Spent 3 summers in UTRP and last year on DEW line to earn enough money to pursue his hobbies. Member in good standing of the Root-Locus Club.



### STAN HODGE

Hails from Pointe de Bois, Manitoba. A very staunch member of the "Grinders Club." Also trying to see how long he can last on U. of M. food. Another member of the Electrical's "Root Loci Club." Future — more grinding.

### CHUCK HONEYMAN

Chuck's most notable achievements over the past four years include running for President of UMSU, being elected Senior Stick of UMES, and mastering the ancient and honorable art of "CB" drawing. He received a sizable grant from the Canada Council for his ornate class notes. Future plans? Sales engineering.



### STAN JOHNSON

Married man Stan, immigrates in from St. James every day. Usually found reprimanding the E.E. instructors. The "Moose" has been a stalwart athlete and handball convener for engineering. Hopes to make enough to buy a car, house, cottage, plane, and other essentials.

## Electrical Graduates



### K. JONES

A computer enthusiast, he is waiting for I.B.M. and Remington Rand to commence bidding for his services. He can usually be found in the bridge lab, (common room), with his cohort in crime proving the superiority of the Jones-Melville system.

### ELLWIN JOPLING

Took school at Hartney. Enjoys playing bridge and is still trying to figure out the Jones-Melville convention. Plans to get out of this country into a warmer climate. Ambition: to make money and enjoy life in general.



### G. W. KAUTZ

Graduated from R.M.C. Hopes to fly Whirlybirds and drive a T-Bird, preferably with a blonde.

### CHARLIE KUNZE

Charlie is a graduate of D.M.C.I. He is the only person in IVE who can comfortably sleep on a lecture bench during a lecture. Loves to eat lunch and take pictures with his camera. Future: blowing up generators for City Hydro.



### STUART MACPHERSON

"Stu" can always be depended upon to find an equation to solve any problem. "I've got it!  $E=IR$ ". Active on council, he is UMES social chairman this year. Stu plans a future with N.E. in Engineering sales.

### BILL MALCOM

Member of the married man's club. Can be identified by his sly laugh, from the front of the lecture room. Megawatt Malcom is one of the rare power option boys who doesn't want a job in power. Future: in electronic computers.



### BILL McDERMID

Graduated from St. James Collegiate in 1957 after a notorious dramatic acting career. With little prodding will spout forth with all sorts of irreverent details on art, music, politics . . . Spent several summers infiltrating the local utilities and plans to work in the electric power field.

### DON MCKENZIE

Don hails from Cartwright, Manitoba, where he spent his "tender" years. While not grinding, he spent his summers working on gas pipelines. He was President of TKE Fraternity this year, a job which kept him pretty busy. Don is single and plans on keeping it that way . . . for a while at least. He intends to enter the sales engineering field.



### RON MELVILLE

Avid bridge player, co-author of the Jones-Melville bidding system. Musical interests include sax and UMSU band. Plans post graduate work in power — possibly in Great Britain, as long as it doesn't involve electronics.

### EDMUND H. NG.

Graduated from Hong Kong Technical College in Mechanical Engineering before entering Electrical Engineering at the U. of M. Interests—photography, hi-fi, badminton, and swimming.

## Electrical Graduates

### ED GEORGE PAVLIN

A Dauphin grad, Ed is enrolled in the Power Option Course. He has at one time or another been enrolled in the IRE, SEIC, CYO, and is presently an honorary member of the Root Locus Club. He is also the manager of the Junior Bisons. Ambition: Perhaps — masters.

### ALBERT H. PENNER

Bert came to us from M.B.C.I., chairman of the "Root Locus Club." He is also a strong advocate of student revolutions, and thinks they would be ideal to replace examinations. Future: Around the world in 80 months.

### KEN POSTGATE

Calls St. James his home, having graduated from St. James Collegiate. One of the Power Option boys, he drives his Vauxhall to U., imposing extortionate rates on his car pool. Hopes to work in power design and will probably name a new circuit theorem some day. Enjoys curling, and water-skiing.

### F. L. PRIVAT

Commutes each day from Norwood. Main sporting interest is curling. Favorite pastime: Bugging L. D.

### JOHN D. ROCK

Past: Attended St. James Collegiate. Present: Graduating from the power option course. Belongs to the Root Locus Club and drifts into the right hand plane. Future: A millionaire.

### RICHARD SCHMIDT

A farmer who hails from Waldersee, Man., not used to rising early, usually makes it for the 3rd class, to copy yesterday's notes. Motto: Never do to-day what's due tomorrow. Future: Northern Electric in Montreal.

### ORRY SIDERAS

This macedonian youth has a dream of becoming a cosmopolitan and a writer, as well as an engineer — but his greatest passion is playing cards.

### HEINZ SPERBER

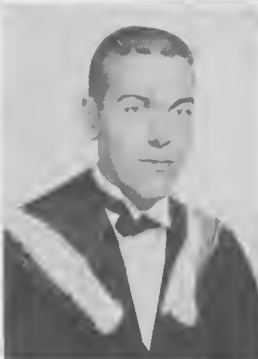
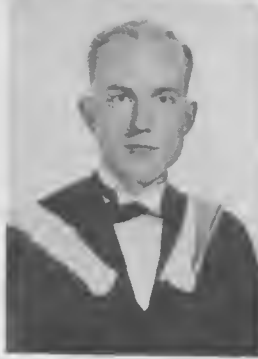
Heinz (51), more commonly known as "Power." An ancient graduate from Miles Macdonell. Hails from the homeland of good music.

### BOB TARRY

Graduated from D.M.C.I. In the air force reserve. Might take post grad. Brewery tour master. A patron of Zorattis. Has an interest in teachers' wages. Active member of the Root Locus Club.

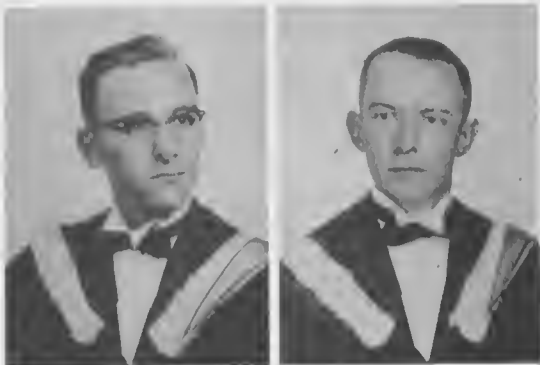
### CLARENCE V. THIO

Clarence is a graduate of Boissevain Collegiate. A keen sports enthusiast. His motto: Work hard and play later. Divides his spare time evenly between hockey and girls. He is taking the communications option. His future is as yet undecided.





## Electrical Graduates



### GERRY THOMAS

A jovial refugee of St. John's High School, Gerry is a member of the IRE. A conscientious and debonair fellow, he is assured of both professional and social success.

### GLEN THORSTEINSON

Came to the U. of M. from St. James Collegiate. A powerhouse of the inter-faculty hockey team. Avid member of the Root Locus Club. Thorny is the Stan Gatz of IVE, proficiently blowing four horns. Future: undecided.



### FRED WALL

Native of that northern outpost, Elmwood. Never misses a 9:30 coffee break. A confirmed artsman, ha's crazy about root loci. Labs always up to date, real keen, i.e. sees everything. Future: Manitoba Telephone System.

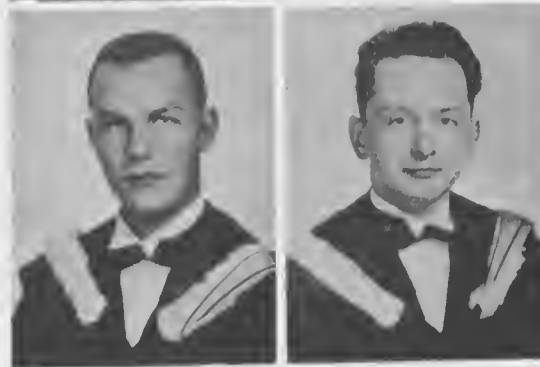
### PETER R. WARKENTIN

Peter hails from Grunthal, Man., and graduated from Gratz Collegiate. He is taking the communications option. Excellent university record seems to indicate post-graduate work but as yet future is undecided. His favorite sport is baseball. He can quite often be found "discussing" world affairs with Morley.



### KEN WU

Born in Can-Tong and came from Hong Kong to study at U. of M. Spends summers up north and says that he likes money more than he hates cold. A hard working student, ambition is to marry two wives.



### MURRAY BOLT

This dashing and brilliant young man came to us via United College and has proved to be one of the brighter stars in the Engineering faculty. A member of the TKE fraternity, he enjoys a good joke and is usually seen in the company of one Al Simeon. Future plans include possible post-grad study in California, and with Murray's good looks and personality he is certain to succeed.

### ALEXANDER JAKOBSCHUK

A "physicist", a scholar and a gentleman. Alex is at his best when tackling problems in electronics — or discussing the merits of Mozart. He always has a ready laugh and helping hand. Desire for future is to see an electron and shake hands with it.



### BERNARD MELMAN

Active in many extra-curricular activities, Bernie has served as president of Sigma Alpha Nu fraternity and president of the B'nai B'rith Hillel Foundation. He also holds the university shot put record.

### GARNET WARD

Another of those outcasts who couldn't decide whether to take Physics or Engineering; he hopes to take Masters next year. He likes music, photography, dancing, reading and Young People's Union but finds time short and the profs are not sympathetic when problems are late. Chief ambition is to build a computer that doesn't know how to play chess.



# POST GRADUATE

## POWER PROM QUEEN CANDIDATE



*Miss Pat McCleave*

# AT THE "P"

Drunk: "What's that crawling up the wall?"

Bartender: "A lady bug!"

Drunk: "Gad, what eyesight!"

\* \* \*

According to a certain E.E., the boys over in E.E. lab have developed a new whiskey test, which runs like this:

Connect 20,000 volts D.C. across a pint of fluid. If the current jumps it, the product is poor.

If the current causes a precipitation of lye, tin, arsenic, iron slag, and alum, the whiskey is fair.

If the liquor chases the current back into the generator, it's darn good stuff.

\* \* \*

CE (in bookstore): "How much is this paper?"

Clerk: "Seventy-five cents a ream."

CE: "It sure is."

\* \* \*

"So your husband is one of the guns of industry?"

"Yes, he's been fired eight times."

\* \* \*

Salesman: "Sir, I have something that's guaranteed to make you the life of the party, allows you to win friends and influence people, helps you forge ahead in the business world and in general makes life a more pleasant and invigorating experience."

Engineer: "I'll take a quart."

\* \* \*

Prof.: "Well, what did you think of the course?"

CE: "I thought it was very well covered. Everything that wasn't covered during the quarter was covered on the final?"

\* \* \*

A wild goose is one that is an inch off center.

\* \* \*

Then there was the ME who thought that steel wool was the fleece from a hydraulic ram.

\* \* \*

A small boy stood gazing at a horse and wagon while the milkman delivered milk.

When he came out the boy observed, "Mister, that horse will never get you home."

"And why not?" asked the milkman.

The small boy explained, "He just lost all his gasoline."

\* \* \*

ME walking up to co-ed: "How many drinks does it take to make you dizzy?"

Co-ed: "Two, and the name is Daisy."

A couple of newlyweds got into the elevator at their hotel. The operator, a cute gal, looked at the groom.

"Hello, darling," she said.

There was an icy silence until the couple got off. When they got to their room the bride exploded.

"Who was that woman?" she demanded.

"Look honey," said the groom, "don't get excited. I'm going to have enough trouble explaining you to her."

\* \* \*

A motorist was picked up unconscious after a smash up and was carried to a nearby filling station. Opening his eyes en route, he began to kick and struggle desperately to get away. Afterwards he explained that the first thing he saw was a "Shell" sign, and "some damn fool was standing in front of the 'S'."

\* \* \*

A young engineer took his girl to the open opera one beautiful warm evening. During the first act he found it necessary to excuse himself. He asked the usher where the men's room might be.

"Turn left and walk to the big oak tree, and there it is."

The young engineer did as he was told and in due time returned to his seat.

"Is the second act over yet?" he asked the girl.

"You ought to know, you were in it."

\* \* \*

Two duck hunters were sitting behind their blind, one drinking from a thermos bottle of coffee, the other from a jug of whisky. After some hours of sipping they spotted a lone duck winging through the sky. Taking quick aim, the coffee drinker rose, let fire, and missed. The whisky drinker rose, let fire and brought the duck down. His companion, properly amazed, complimented him on the shot. He replied, "Aw, it's nothing, I usually get five or six out of a flock like that."

\* \* \*

The one who thinks our jokes are poor  
Would straight-way change his views  
Could he compare the jokes we print  
With those we do not use.

\* \* \*

Pullet to hen: How come you lay such big eggs?

Hen: Well, you see, you just . . .

Pullet: Never mind telling me, show me!

Hen lays beautiful egg.

Pullet: How much do your eggs sell for?

Hen: About 45c a dozen.

Pullet: How much do my eggs sell for?

Hen: About 35c a dozen.

Pullet: So for 10c I should bust my ass?



